INSTALLATION INSTRUCTIONS

Amsco® Eagle® Model 3017
100% Ethylene Oxide Sterilizer/Aerator

(3/03/95) **129353-511**
Rev. 2

A WORD FROM STERIS CORPORATION

Follow each step of the uncrating/installation instructions **in the order presented**. Open the carton carefully to avoid damage to the equipment inside. If you find any indication of damage to the equipment (no matter how slight), show it to your supervisor.

To properly install this unit, you will need the Equipment Drawings (previously furnished), showing all utility service and space requirements. If drawings cannot be located, replacement copies may be obtained by writing, wiring, faxing or telephoning STERIS giving the serial and model numbers of your equipment.

Once installed, equipment operation should be tested by a qualified service technician prior to your usage of the equipment.

If STERIS supervision is desired for installing and starting up this equipment, contact your local STERIS representative.

Indications for Use

Amsco® Eagle® Series 3017 100% Ethylene Oxide Sterilizer/Aerator, is designed for use on items sensitive to moisture and/or heat which cannot be sterilized by steam or dry heat.

Items should always be sterilized in accordance with the sterilized product manufacturer's recommendations.

Items listed by the sterilized product manufacturer not to be exposed to ethylene oxide are specifically prohibited.

Advisory

A summary of the safety precautions to be observed when operating this equipment can be found in Section 1 of this manual. Do not operate or service the sterilizer until you have become familiar with this information.

Any alteration of the unit or addition of unauthorized equipment which affects its operation will void the warranty, could adversely affect sterilization efficacy, could violate federal, state and local regulations, and may jeopardize your insurance coverage.

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SUMMARY OF WARNINGS AND CAUTIONS 1

Following is a list of the safety precautions which must be observed when operating this equipment. WARNINGS indicate the potential for danger to personnel, and CAUTIONS indicate the potential for damage to equipment. These precautions are repeated (in whole or in part), where applicable, throughout the manual. This is a listing of all safety precautions appearing in the manual. Carefully read them before proceeding to use or service the unit.

WARNINGS!

⚠ **EO is toxic. Do not attempt to operate this equipment until all utility connections have been made and are operating correctly. Users must be trained and must carefully review the equipment manuals and EO Safety Guidelines prior to operating this equipment.**

CAUTIONS!

⚠ **Extreme care must be taken in moving and installing these units.**

⚠ **Do not open sterilizer door(s) until told to do so in this installation procedure.**

⚠ **Attach temporary ground from the bare metal portion of the sterilizer to existing earth ground prior to removing any packing material from the unit. Do not remove this ground until the sterilizer is ready to be moved to the installation site.**

⚠ **Remove protective plastic coverings slowly to reduce the level of static discharge.**

⚠ **Transfer device is to be used for moving the unit as close as possible to the installation site.**

⚠ **Never use a wire brush, or steel wool on door and chamber assembly.**

⚠ **IMPORTANT: Be sure to check the Occupational Health and Safety Act, National Electric Code, as well as local electric and plumbing codes for any special requirements that may pertain to the installation of this equipment.**

WARNING: GROUNDING CIRCUIT CONTINUITY IS VITAL FOR SAFE OPERATION OF EQUIPMENT. NEVER OPERATE EQUIPMENT WITH GROUNDING CONDUCTOR DISCONNECTED

AVERTISSEMENT: POUR UN FONCTIONNEMENT SANS DANGER, NE JAMAIS UTILISER L'ÉQUIPEMENT SI LE FIL DE CONTINUITÉ DES MASSES N'EST PAS RACCORDÉ.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Shielded cables must be used with this unit to ensure compliance with the Class A FCC limits.

"This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications."

"Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques (de la class A) prescrites dans le Reglement sur le brouillage radiolectrique edicte par le ministere des Communications du Canada"

BEFORE INSTALLING THE EQUIPMENT 2

IMPORTANT: Be sure to check the Occupational Health and Safety Act, National Electric Code, as well as local electric and plumbing codes for any special requirements that may pertain to the installation of this equipment.

2.1 Study The Sterilizer Requirements

1. Study the EQUIPMENT and the EQUIPMENT DRAWING and learn what you are to install.

NOTE: A transfer device capable of safely supporting 400 lbs. is to be used to move sterilizer/aerator with its shipping pallet to installation site.

2.2 Review Installation Requirements

Complete the following checklist before you start your work. The completed checklist will make these instructions easier to understand. Refer to this checklist, when necessary, as you progress from one step to another.

❑ 1. Clearance — Sterilizer/aerator general clearance and weight (on pallet) considerations are as follows:

Size: 36-3/4 W x 36-3/4 H x 40-3/4 L inches
93.3 W x 93.3 H x 103.5 L cm.

Weight: 365 lbs. (166 kg.) - 100V and 120V unit
407 lbs. (185 kg.) - 220V unit

NOTE: If this machine is installed next to other equipment, shutoff valves and disconnect switches must be so placed that service can be shut off and locked out to one piece of equipment at a time. All such valves and switches must be clearly labeled as to which piece of equipment they service.

❑ 2. Utility Service Lines — Check equipment drawings supplied with the sterilizer for specific size requirements and consumption figures.

a. Shutoff valve (capable of being locked out) must be installed in compressed air supply line near sterilizer ... so that the sterilizer can be serviced without shutting off the building supply.

b. Disconnect switch (capable of being locked in OFF position) must also be installed in electric supply line near the sterilizer.

- Provide a terminal box for single-phase electric service for the sterilizer controls.

  - 120 VAC, 50/60 Hz, 20 A, or

  - 100 VAC, 50/60 Hz, 20 A, or

  - 240 VAC, 50/60 Hz, 10 A,

  depending on model purchased

❑ 3. EO Gas Exhaust - Verify that the building dedicated EO gas exhaust connection is near sterilizer.

Refer to equipment drawing for specific requirements.

❑ 4. Air Supply - Verify that the building compressed air supply line is near sterilizer.

Refer to equipment drawing for actual requirements.

❑ 5. Ventilation Duct - Verify that the building dedicated EO ventilation duct connection is near sterilizer and that it includes a damper in duct line required for service testing.

Refer to equipment drawing for actual requirements.

NOTE: Quality of air supplied to the 3017 is very important. Air contaminated with oil or water will cause sterilize malfunction. Dry, oil free air must be supplied.

❑ 6. Ethylene Oxide Gas Cartridge (reorder no. PB013).

NOTE: For guidelines and recommendations on the control of occupational exposure to EO, refer to AMSCO publication P-62942-091: Recommendations for Effective Use and Installation of Ethylene Oxide Sterilizers and Aerators.

a. The storage temperature of the ethylene oxide gas cartridges must be less than 100°F (38°C).

NOTE: If ambient temperature in recess area containing sterilizer/aerator exceeds temperature of selected cycle, sterilizer may not run (e.g., if recess area temperature is higher than 100°F [38°C], 100° cycle may not run).

b. Maintain only one day's supply or a maximum of twenty-four (24) EO cartridges (two [2] boxes) in the immediate sterilizer area having a minimum of ten (10) air changes per hour.

❑ 7. A refrigerated air dryer is supplied with each unit. Verify that mounting location and electrical supply is available for the device.

❑ 8. EO Disposer. A separate document is necessary for installing and connecting an EO disposer. Refer to Manual P-129353-516.

2.3 Review Installation Requirements - Rack Mount (optional)

❑ 1. Recessed Area

The gas sterilizer and rack mount area must be maintained and operated in an area where temperature does not exceed 100°F (38°C). The area must also have at least 10 air changes per hour.

❑ 2. Flexible Connections

Flexible connections are required for the Model 3017 EO Sterilizer/ Aerator to connect to building utilities flexible lines for compressed air, EO gas exhaust, EO ventilation duct are included with the purchase of each mounting rack. Flexible lines for electrical power supply is by others. This is required to permit rolling the sterilizer and rack mount out of the recessed area for servicing.

❑ 3. Finished Wall Opening

The finished wall opening must be in accordance with equipment drawing.

❑ 4. Finished Floor

The finished floor in the recessed area must be at the same level as the finished floor in front of the wall opening. This is required to permit rolling the sterilizer and rack mount out of the recessed area for servicing. Finished floor area in recessed room must be in accordance with equipment drawing and must be flat and level.

2.4 Mounting Options

The Model 3017 EO Gas Sterilizer/Aerator can be arranged for free-standing or on a rack mounted (optional item) with one (1) or two (2) sterilizers.

1. Free Standing Unit - See figure 2-1.

   The sterilizer/aerator can be mounted on a stand or tabletop. The stand or tabletop must be capable of supporting the sterilizer which weighs 300 lbs. (136 Kg) for 100/120V units and 340 lbs. (154 Kg) for 240V units.

   See Equipment Drawing for service clearance requirements.

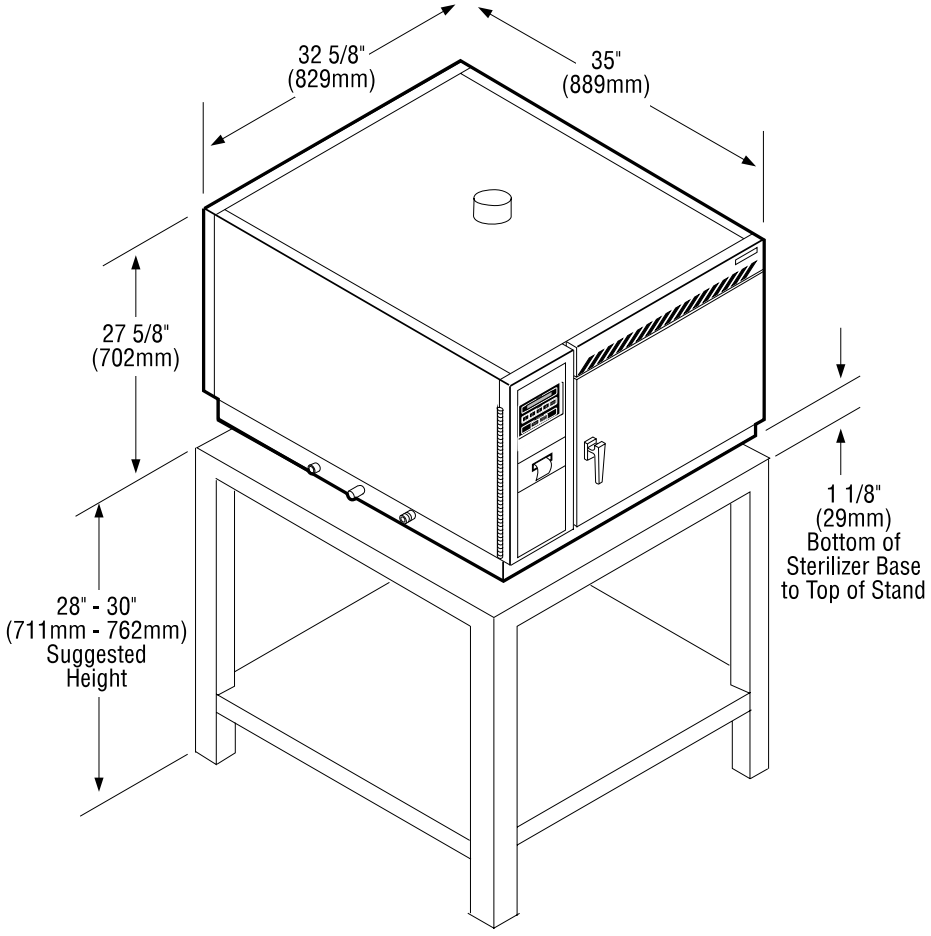


Fig. 2-1 Free Standing Sterilizer/Aerator

2. Recessed Dual Rack Mounted Unit (optional item) - See figure 2-2 and 2-3.

   The sterilizer/aerator can be arranged for recessed rack mounting (optional item) of either one (1) or two (2) sterilizers.

   The rack mount unit is for recessing through one (1) wall which requires a wall opening of 42 inches (107 cm) wide x 77 inches (196 cm) high.

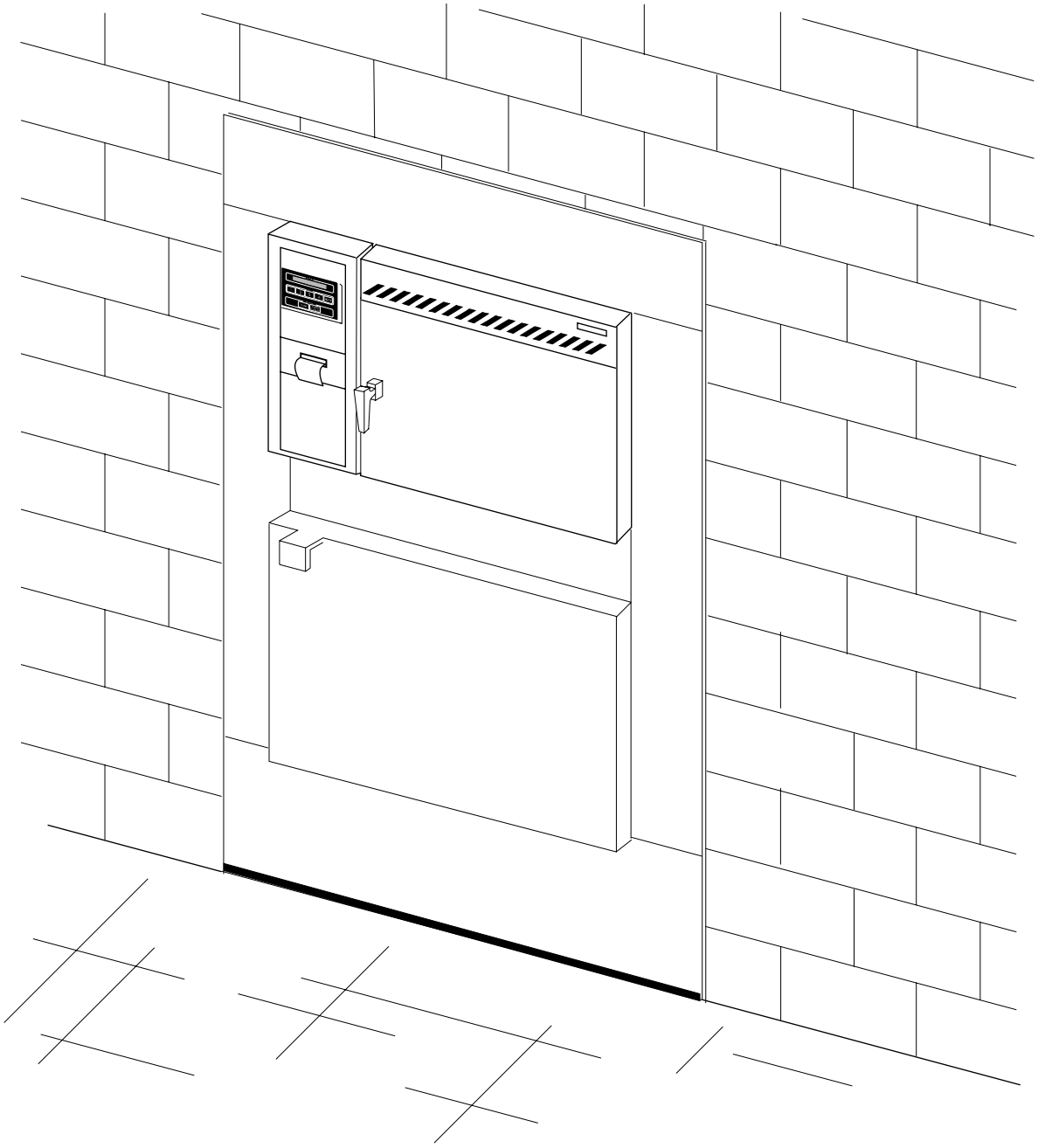


Fig. 2-2 Recessed Dual Rack Mounted (optional) Sterilizer/Aerator (One Sterilizer) With Access Door to Lower Storage Shelf

a. Shipping size and weight

Rack	34W x 42H x 51L inches 86W x 107H x 130L cm.
Weight:	135 lbs. (61 Kg.)
Wall Trim Package	34W x 3H x 62L inches 86W x 8H x 157L cm.
Weight (one unit):	90 lbs. (41 Kg.)
Weight (two units):	75 lbs. (34 Kg.)

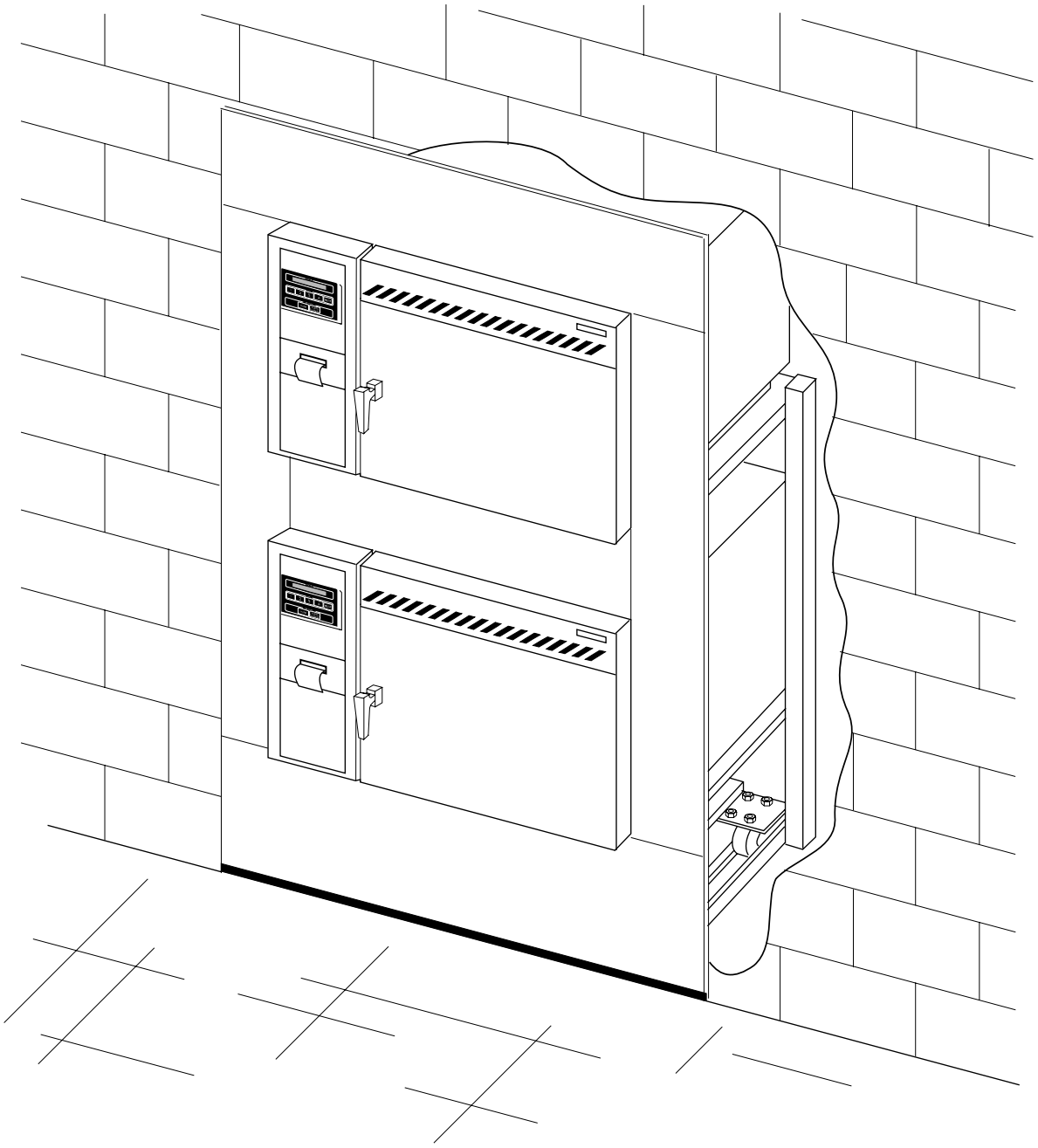


Fig. 2-3 Recessed Dual Rack Mounted (optional) Sterilizer/Aerator (Two Sterilizers)

3. Recessed Single Rack Mounted Sterilizer - See Figure 2-4.

   The sterilizer/aerator can be arranged for recessed mounting for a single sterilizer.

   The rack mount unit is for recessing through one (1) wall which requires a wall opening of 36-3/4 inches (93 cm) wide x 74-1/4 inches (189 cm) high.

   a. Shipping size and weight

   Rack 34W x 34H x 37L inches
   86W x 86H x 94L cm.

   Weight: 110 lbs. (50 Kg.)

   Wall Trim Package 21-3/4W x 3-3/4H x 71-3/4L inches
   55W x 10H x 182L cm.

   Weight: 61 lbs. (28 Kg.)

Fig. 2-4 Recessed Single Rack Mounted Sterilizer/Aerator

CAUTION: Remove protective coverings slowly to reduce the level of static discharge.

NOTE: During this procedure reference will be made to "Operating End" door and, if a double door machine, "Non-Operating End" door. The "Operating End" door is that door at the end of the sterilizer where the printer is installed.

NOTE: When unit is a double door unit, be certain installation is made with "Operating End" at desired location as established by appropriate authority.

3.1 Remove Remaining Packing

1. Remove plastic shipping shroud slowly (to reduce the level of static discharge) from over sterilizer. Save shroud so it can be reused to cover sterilizer until it is placed in use.

3.2 Install Free Standing Sterilizer/Aerator

1. Remove the four (4) 3/8" hold down bolts, on each corner, from underside of top of pallet. Bolts are approximately 8" back from the front and the rear of the pallet.
2. Use a transfer device with forks (1" maximum thickness) spread apart to a maximum of 26" (660mm spread). Remove sterilizer (300 lbs. [136 Kg] for 100/120V units and 340 lbs. [154 Kg] for 240V units) from shipping pallet. (See Fig. 3-1.)

NOTE: The foam pads that the sterilizer sits on are 26-1/4" (668mm) apart.

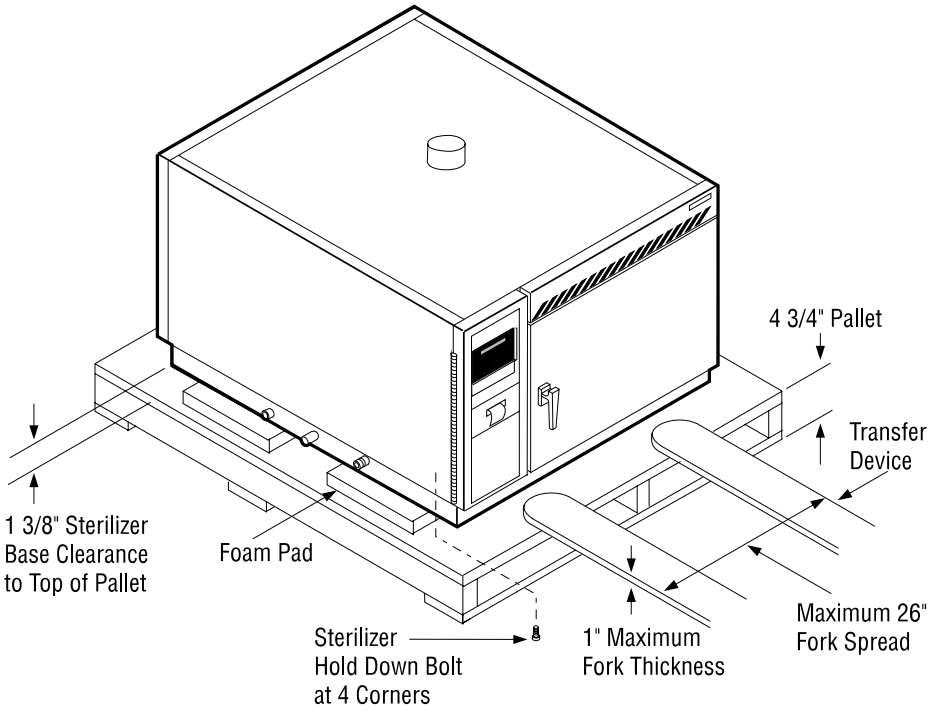

4 3/4" Pallet
Transfer Device
1 3/8" Sterilizer Base Clearance to Top of Pallet
Foam Pad
Sterilizer Hold Down Bolt at 4 Corners
1" Maximum Fork Thickness
Maximum 26" Fork Spread

Fig. 3-1. Sterilizer on Shipping Pallet

3. Install Sterilizer/Aerator (See Fig. 3-2).

   a. Temporarily adjust the four (4) sterilizer leveling pads to be 1-3/8" (35mm), to permit removal of transfer device after sterilizer is set on stand, from bottom of sterilizer base to bottom of the leveling pad. Set sterilizer on stand.

   b. Remove transfer device from under sterilizer.

4. Level sterilizer.

   a. Adjust the four (4) sterilizer leveling pads (one at each corner of sterilizer) to a height of 1-1/8" (29mm) from bottom of sterilizer base to top of stand. (See Fig. 3-2).

   b. Place a spirit level against vertical surface of sterilizer operating end door for checking level of sterilizer front to back.

   c. Place a spirit level across the front top edge of the cabinet panel for checking level of sterilizer side to side.

   d. Sterilizer is now ready for connecting to the required services.

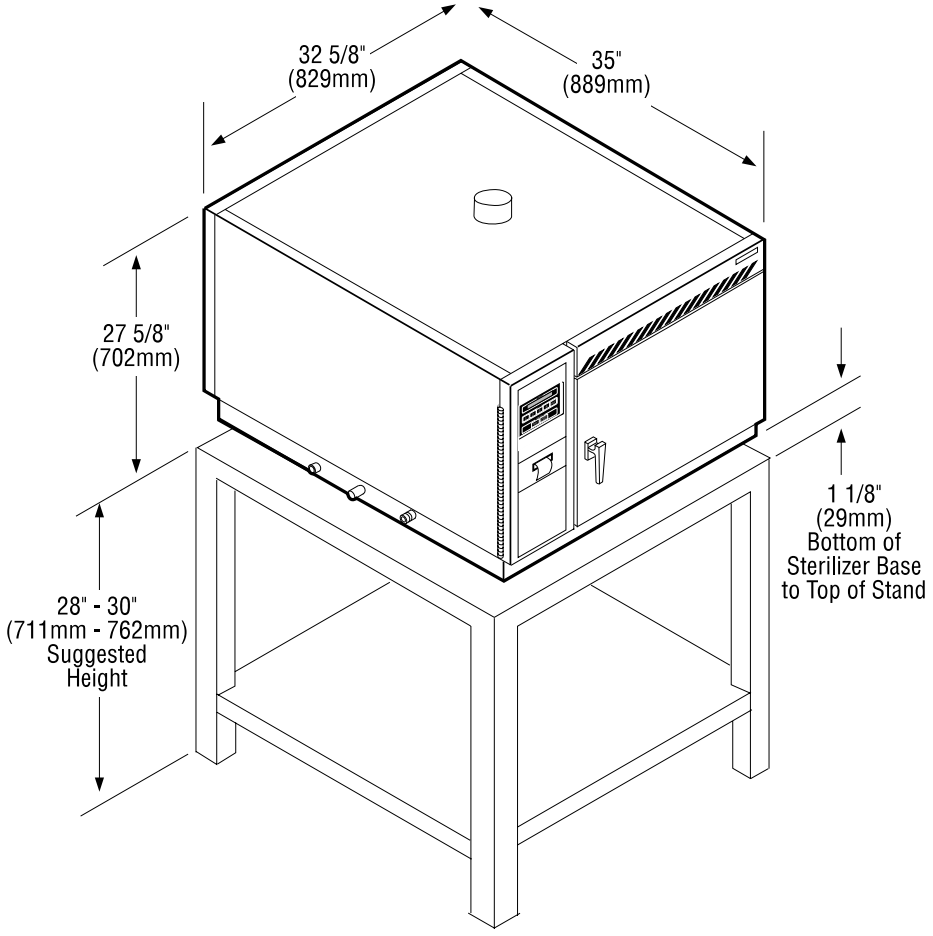


Fig. 3-2. Sterilizer/Aerator Set in Place

5. Connecting Utilities to Sterilizer/Aerator. See Fig. 3-3

Refer to appropriate AMSCO Equipment Drawing for required pressures and quality of those services as well as proper connection locations and connection size recommendations.

NOTE: Sterilizer terminal line fittings are tagged. Refer to Equipment Drawing for pipe sizes and supply requirements. Building service lines to and from the equipment should sized to allow specified pressures and flow rates. Failure to supply recommended pressures and flow rates may cause equipment to malfunction.

Electrical, EO gas exhaust and air supply connections (see Fig. 3-3) must not interfere with the removal (lifting up) of the left side cabinet panel for servicing.

If sterilizer/aerator must be moved or repositioned for servicing, flexible lines must be used on all of the utility connections to the sterilizer.

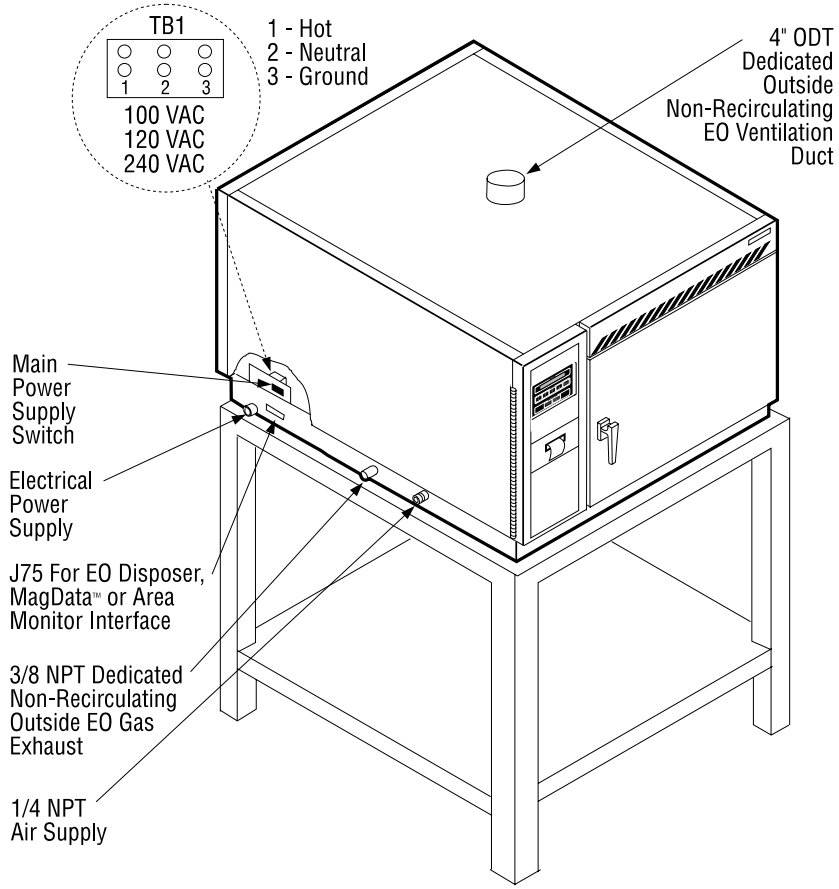


Fig. 3-3. Utility Connections

WARNING: EO is toxic. Do not attempt to operate this equipment until all utility connections have been made and are operating correctly. Users must be trained and must carefully review the equipment manuals and EO Safety Guidelines prior to operating this equipment.

a. Refrigerated Air Dryer - Install per instructions sent with refrigerated air dryer.

b. Compressed Air Supply - blow out building air supply line to remove chips, scale, etc. Mount air filter/dryer (supplied with sterilizer) near sterilizer and connect to building compressed air supply. Connect line from air filter/dryer to sterilizer.

c. Shut Off Valve (capable of being locked out) must be installed in the compressed air supply line near the sterilizer so that sterilizer can be serviced without shutting off the building supply.

d. EO Gas Exhaust (temperature range is 100°F [38°C] - 130°F [54°C]) from the EO gas sterilizer is to be connected to an EO gas disposer or direct piped to outside of building. Mount a moisture trap (not by AMSCO) near sterilizer if the vertical rise of the gas exhaust line exceeds 10 ft (3m). Connect moisture trap to gas exhaust line. Connect line from moisture trap to sterilizer.

   Do not connect EO gas exhaust to ventilation (item e. below).

e. Electrical - Connect building electrical supply line to power input sterilizer terminal board (TB1) as shown in Fig. 3-3.

   Disconnect switch (capable of being locked in OFF position) must also be installed in the electrical supply line near the sterilizer.

   IMPORTANT - Check to be sure that the sterilizer power supply switch is in the OFF position prior to connecting electric power to the sterilizer.

   - 100/120/240 volt HOT (black wire) to terminal
   - 100/120/240 volt NEUTRAL (white wire) to terminal
   - GROUND (green wire) to terminal

   Remove sterilizer left side panel by removing three (3) screws located at bottom edge of side panel and lifting it up. Connect electric power supply to terminal board TB1. Reinstall side panel onto sterilizer with screws.

f. Ventilation Duct - Connect the 4" (102mm) O.D. tube to building dedicated outside EO gas exhaust system. Ventilation duct to include a damper (not by AMSCO) for sterilizer test purpose.

   NOTE: The outside dedicated EO exhaust termination must be located at a minimum of 25 feet from any building air intake, window or door. AMSCO recommends you consult your HVAC professional.

This completes the installation of the sterilizer/aerator.

IMPORTANT: Refer to section entitled “Sterilizer Basket Removal,” (page 3-34) to remove cardboard securing the two (2) baskets within the sterilizer chamber. The cardboard should be removed prior to placing sterilizer into operation.

3.3 Install Dual Rack Mounted Sterilizer/Aerator

1. Rack Mount Components - Check that all major rack mount components shown in Fig. 3-4 are with the unit. If any of the components are damaged (no matter how slight), report it to your supervisor. Note that if the unit is equipped with a single sterilizer, there will also be a storage door and accompanying hardware.

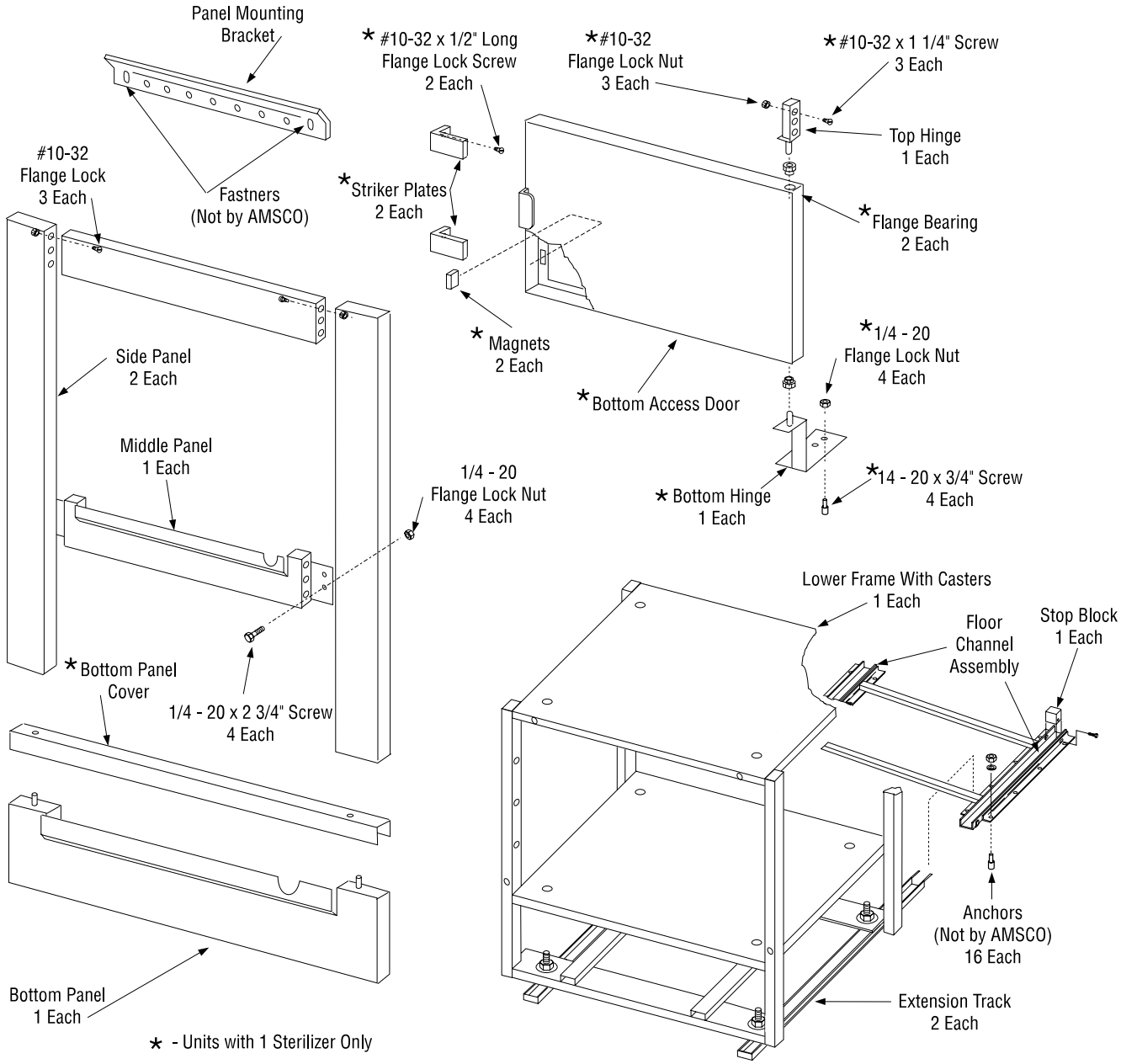

Panel Mounting Bracket
* #10-32 x 1/2" Long Flange Lock Screw 2 Each
*#10-32 Flange Lock Nut 3 Each
*#10-32 x 1 1/4" Screw 3 Each
Top Hinge 1 Each
#10-32 Flange Lock 3 Each
Fastners (Not by AMSCO)
*Striker Plates 2 Each
*Flange Bearing 2 Each
* Magnets 2 Each
*1/4 - 20 Flange Lock Nut 4 Each
Side Panel 2 Each
*Bottom Access Door
Middle Panel 1 Each
1/4 - 20 Flange Lock Nut 4 Each
* Bottom Hinge 1 Each
*14 - 20 x 3/4" Screw 4 Each
Lower Frame With Casters 1 Each
Floor Channel Assembly
Stop Block 1 Each
*Bottom Panel Cover
1/4 - 20 x 2 3/4" Screw 4 Each
Anchors (Not by AMSCO) 16 Each
Bottom Panel 1 Each
Extension Track 2 Each
* - Units with 1 Sterilizer Only

Fig. 3-4. Dual Rack Mount Components

2. Floor Channel Installation - See Fig. 3-5.

   a. Set the floor channel assembly in place in the recess area with the holding tabs (see Fig. 3-5) of the floor channels at the front of the wall opening. Align the floor channel assembly so that the front edge of the track is 1/2" (12.7 mm) back from the front edge of wall and centered within the wall opening.

   b. Tape the floor channel assembly in place.

   c. Mark and drill two (2) holes front and rear for both floor channels.

   d. Use appropriate (1/4") anchors (not by AMSCO) for the four 3/8" holes and bolt floor channel assembly in place. Drill balance of holes in channels and anchor all channel holes in place.

   e. Attach the stop block, as shown in Fig. 3-5, to the back end of the right hand channel. Temporarily adjust the stop block to the rear of the channel. Final adjustment will be done later during installation.

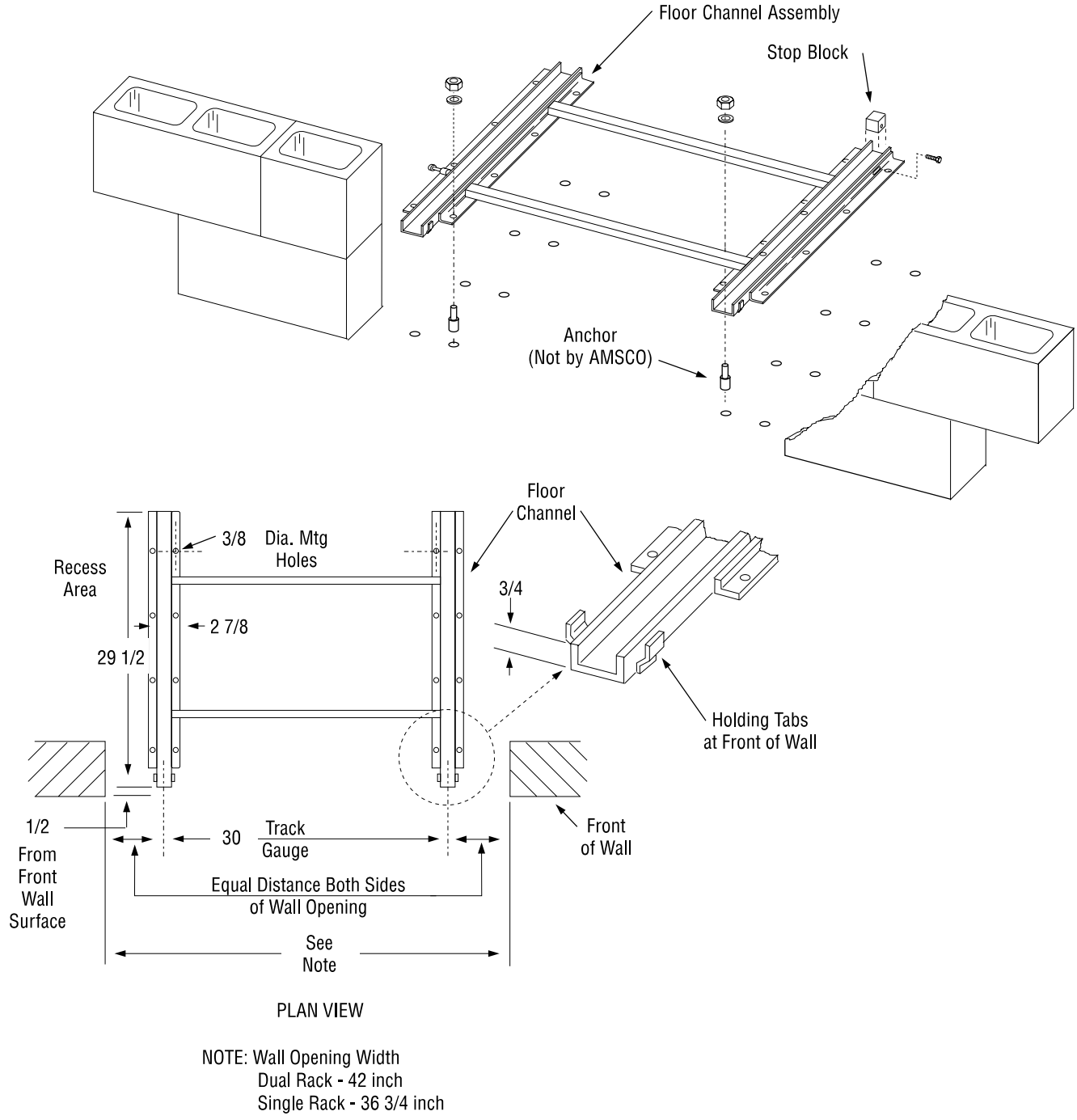


Fig. 3-5. Floor Channel Installation

3. Rack and Extension Track Installation - See Fig. 3-6.

   a. Roll rack onto the floor channel in the recess area.

   b. Adjust the caster adjustment bolts (four) so that the top surface of the rack is 43-1/4" (109.9 cm) above the floor surface in the recess area. Check that the rack is level (with a spirit level) side to side and front to back.

   c. Attach the two (2) extension tracks to the floor channel holding tabs.

   d. Roll the rack back out of the recess area onto the extension tracks.

   e. The rack is now in position for sterilizer installation onto the rack.

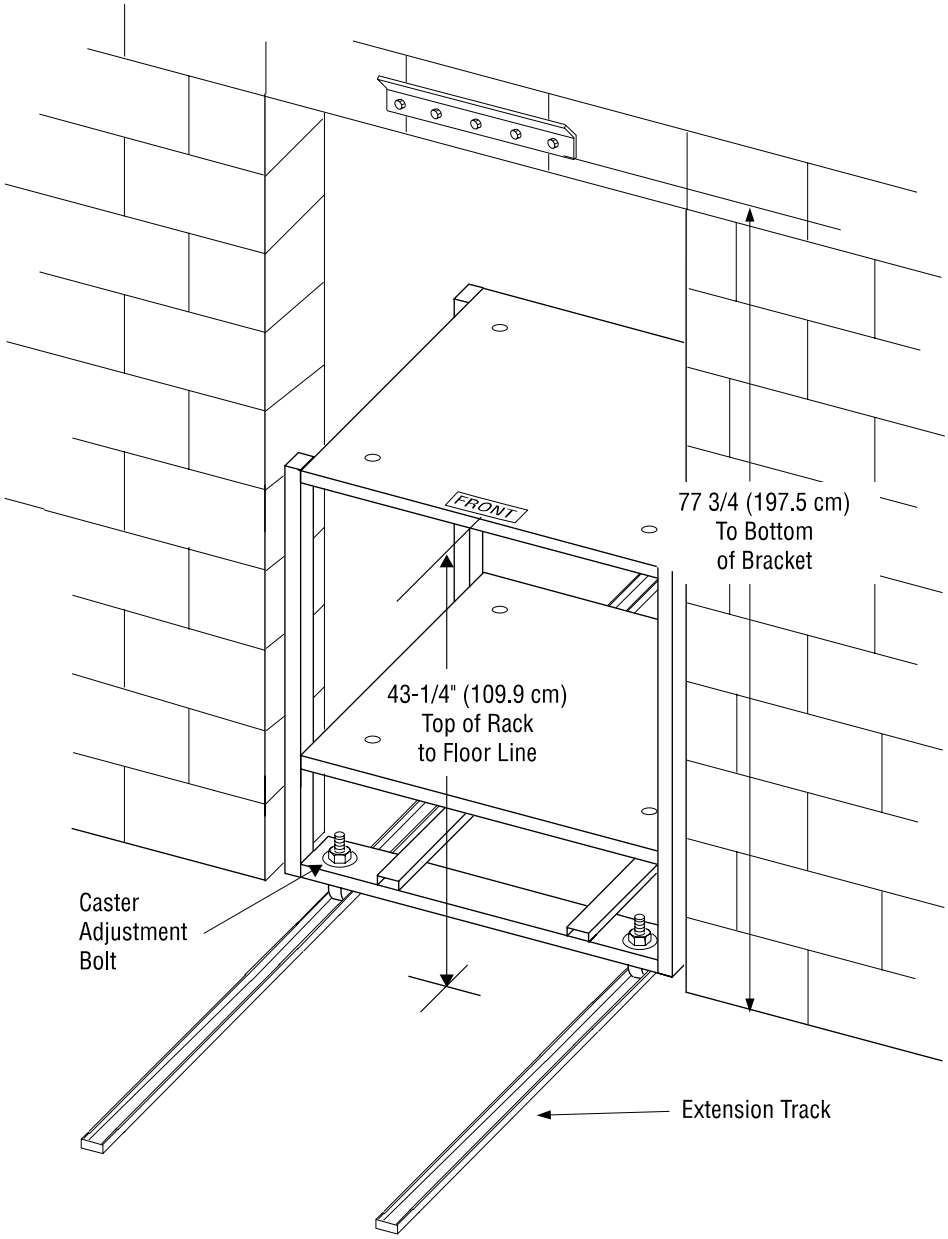


Figure 3-6. Extension Tracks and Cart

4. Install Sterilizer onto Rack

   a. Remove the four (4) 3/8" hold down bolts, one each corner, from underside of top of pallet. Bolts are approximately 8" back from the front and the rear of the pallet.

      IMPORTANT: Keep the four 3/8" bolts as they will be used later to attach sterilizer to rack mount shelf.

   b. Use a transfer device with forks (1" maximum thickness) spread apart to a maximum of 26" (660mm spread). Remove sterilizer (300 lbs. [136 Kg] for 100/120V units and 340 lbs. [154 Kg] for 240V units.) from shipping pallet.

NOTE: The foam pads that the sterilizer sits on are 26¼" (668mm) apart.

5. Install Sterilizer/Aerator - See Fig. 3-7.

   a. Temporarily adjust the four (4) sterilizer leveling pads to be 1-3/8" (35mm), to permit removal of transfer device after sterilizer is set on rack, from bottom of sterilizer base to bottom of the leveling pad. Set sterilizer on top shelf.

   b. Remove transfer device from under sterilizer.

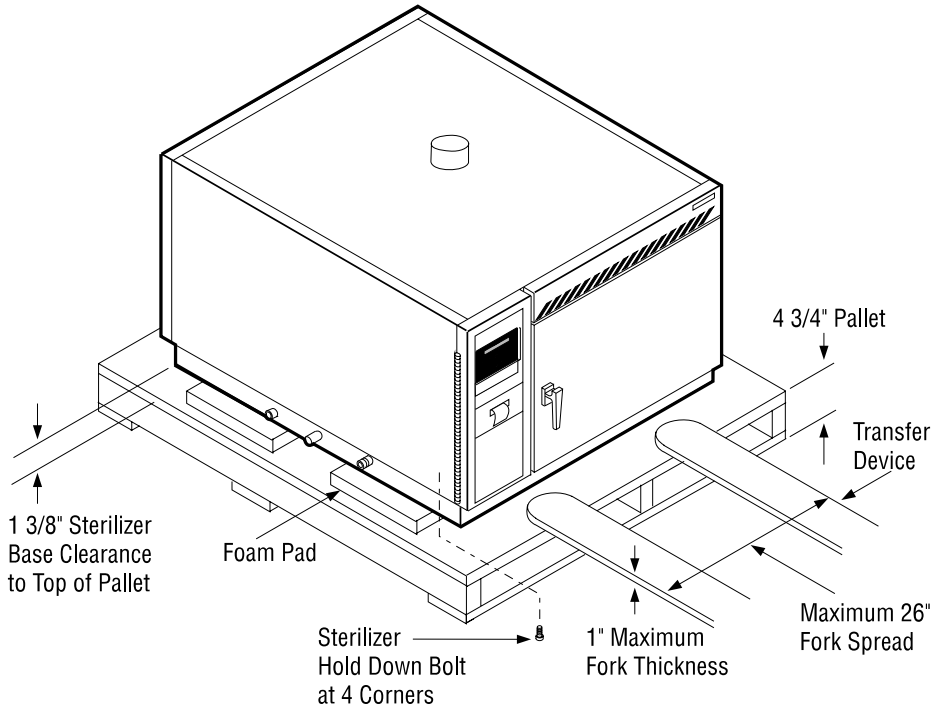

4 3/4" Pallet
Transfer Device
1 3/8" Sterilizer Base Clearance to Top of Pallet
Foam Pad
Sterilizer Hold Down Bolt at 4 Corners
1" Maximum Fork Thickness
Maximum 26" Fork Spread

Figure 3-7. Sterilizer on Shipping Pallet

c. Position sterilizer so that front of sterilizer base is flush with front of the rack (see section A-A).

e. Bolt sterilizer to rack shelf using the four (4) 3/8" bolts that were used to attach the sterilizer to the sterilizer shipping base. Do not tighten bolts at this time. A set of (4) bolts are shipped with the sterilizer in case the shipping base bolts are damaged in shipment.

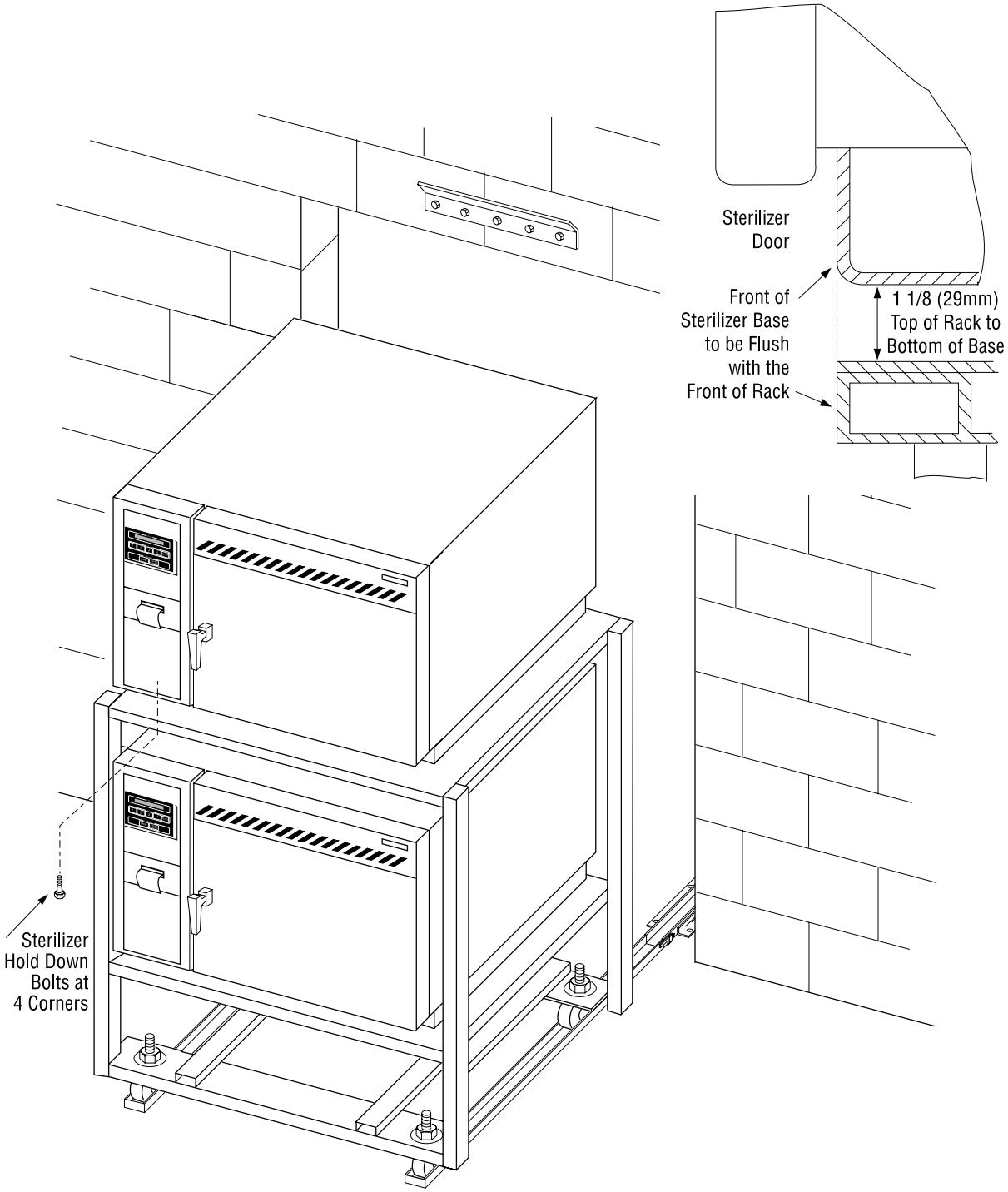


Figure 3-8. Sterilizer on Rack Mount

6. Level sterilizer.

   a. Adjust the four (4) sterilizer leveling pads (one at each corner of sterilizer) to a height of 1-1/8" (29mm) from bottom of sterilizer base to top of shelf. (See Fig. 3-8).

   b. Place a spirit level against vertical front surface of sterilizer operating end door for checking level of sterilizer front to back.

   c. Place a spirit level across the front top edge of the sterilizer cabinet for checking level of sterilizer side to side.

   d. Loosely attach the four (4) bolts to secure the sterilizer to the rack shelf (see Fig. 3-8). Do not tighten at this time.

   e. Sterilizer is now ready for trim panel installation.

7. Install trim panels - See Fig. 3-9 and 3-10.

   Trim panels are installed after the sterilizer(s) have been mounted onto the rack.

   Single sterilizer unit has upper panel, middle panel, side panels, lower access door to storage shelf, and a lower panel.

   Two sterilizer unit has upper panel, side panels, middle panel, and a lower panel.

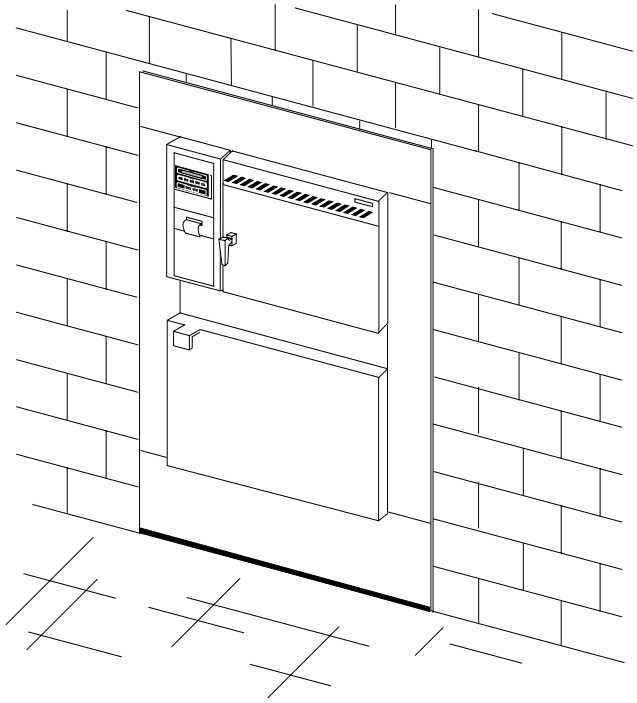


Figure 3-9. Single Sterilizer Unit with Lower Access Door

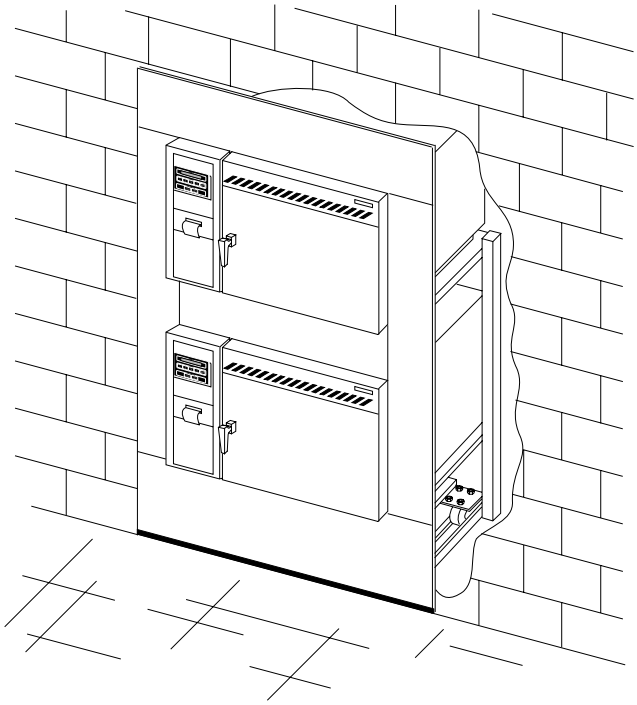


Figure 3-10. Two Sterilizer Unit

Single or Two Sterilizer Unit - See Fig. 3-9.

The mounting trim panel sequence is to be as follows:

- Attach top door hinge to center panel (single sterilizer unit only)
- Attach center panel to rack
- Correctly position the sterilizer(s) and tighten
- Mount lower access door and bolt hinge to frame (single sterilizer unit only)
- Mount striker plates and magnets (single sterilizer unit only)
- Rack stop and hook adjustments
- Bolt side and top panels together
- Install panel mounting bracket to wall
- Mount top/side panel assembly and bottom panel

⚠ CAUTION: Remove protective coverings slowly to reduce the level of static discharge.

The extension tracks are to be in place (in front of the wall) and the rack is to be positioned outside of the recess area. See Fig. 3-6.

Remove the protective coverings from all panels.

a. **Single sterilizer unit only** - Attach top hinge to center panel using three #10-32 x 1-1/4" screws and flange lock nuts - See Fig. 3-11.

b. **Single sterilizer unit only** - Place the bottom cover panel over the bottom trim panel.

c. Attach center panel to the rack using four 1/4-20 x 2-3/4" screws and flange lock nuts.

d. Adjust the sterilizer to center it with respect to the middle panel. The top sterilizer should be pulled forward until the base is flush with the center panel. If the unit is equipped with two sterilizers, the lower sterilizer should be pulled out until the back edge of the scavenger panel is even with the center panel. The sterilizer mounting bolts can now be tightened.

e. **Single sterilizer unit only** - Mount the flange bearing to the pin on the top door hinge. Slide door onto the pin and mount another flange bearing to the pin on the bottom door hinge. Slide the bottom door hinge into the slot on the door and hold the door in place. Attach on 1/4-20 flange screw and lock nut loosely in place on the base of the rack. Check positioning of door, attach the remaining three screws and nuts and tighten.

f. **Single sterilizer unit only** - Mount striker plates on rack and insert magnets into the door. Check the door closing to ensure that the door is flush when closed. Adjust the striker plates if necessary.

g. Roll the rack and sterilizers into the wall opening, leaving approximately 1 to 2 inches sticking out into the room.

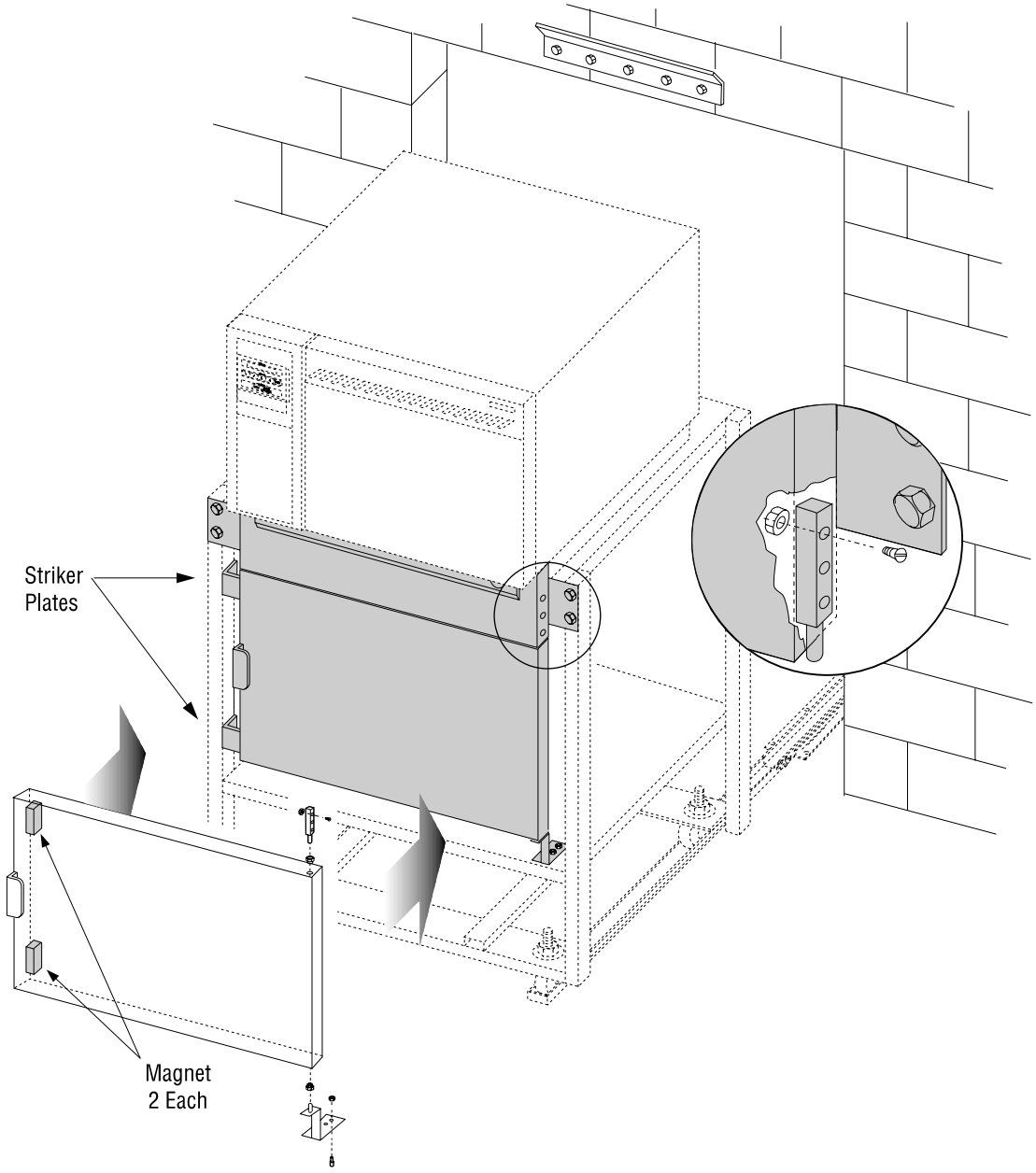


Figure 3-11. Mounting Middle Panel and Door (Single Sterilizer Unit)

h. Rack stop and hook adjustment - See Fig. 3-12.

The extension tracks are to be in place (see Fig. 3-6) and the rack mount should be positioned slightly outside of the recess area. The rack mount has a stop block which, when installed properly, will prevent damage to the stainless steel trim panels or damage to the wall when moving rack mount back into recess area. The rack mount hook keeps the rack mount from moving forward (out of the recess area).

i. Stop Block Adjustment

1. Remove the stop block from the rear of the right floor channel. Apply petroleum jelly (or equivalent) to the bottom of the stop block and channel portion beneath the stop block.
2. Reassemble the stop block (loosely) back onto the right floor channel and in its forward-most position.
3. Slowly move the rack mount back into the recess area until the trim panels meet but **do not** quite touch the front surface of the wall opening.
4. Slowly move the rack mount back out of the recess area.
5. Tighten the stop block taking care not to move the block position while tightening the block in place. See Fig. 3-12.

j. Hook Adjustment - See Fig. 3-12.

1. Attach the hook assembly to the holding bracket located at the lower left (front) corner to the rack mount.
2. The rack mount must be in place within the recess area and the right rear caster must be in contact with the stop block.
3. Place the hook over the shoulder bolt and tighten the nut on the shaft of the hook to keep the hook in the locked position.
4. Remove the two (2) extension tracks from the floor channels and store them either on or under the bottom rack shelf within the recess area.

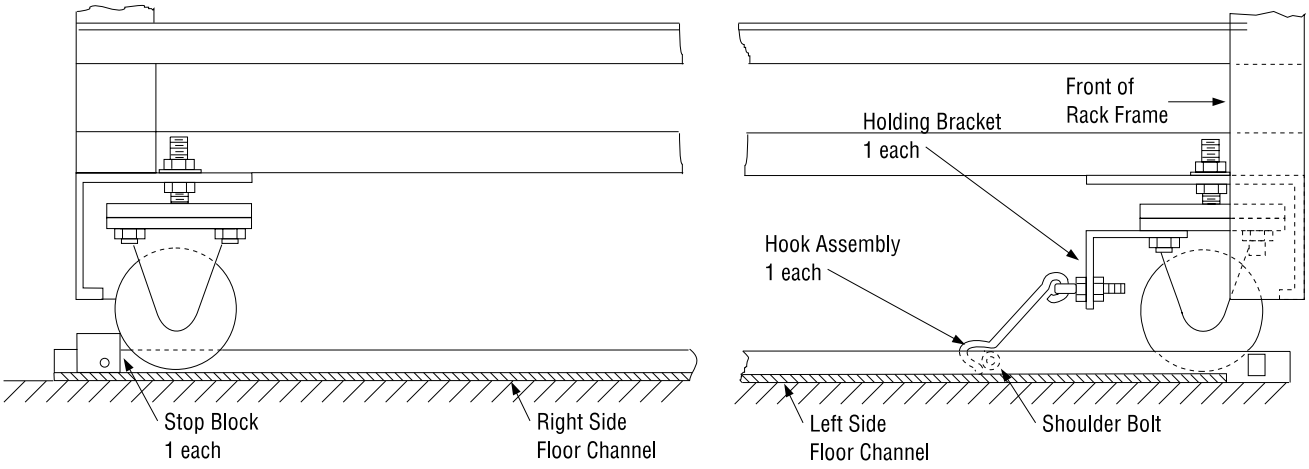


Figure 3-12. Rack Stop and Hook Adjustment

k. Assemble side trim panels to the top trim panel using six 10-32x1/2" screws and 10-32 nuts.

l. Mount the panel mounting bracket above the wall opening 77-3/4" from the floor to the bottom of the bracket using **only** the two (2) slotted holes at ends of the bracket (See Fig. 3-6). Do not tighten at this time.

m. See Fig. 3-13. Place the assembled trim panels (top and side panels) around the sterilizer by placing the right hand upright behind the large sterilizer door hinges and then the left side upright behind the control door hinges. Push the sterilizer and trim panel assembly back until the side panels are flush to the wall.

n. Lift the trim panel assembly up approximately 1" and place the bottom trim panel on the floor under side trim panels.

o. Slowly slide the trim panel assembly downward until top panel engages the panel mounting bracket and the holding pins in the bottom panel insert into the holes on the side trim panels. Check the panel assembly with a spirit level.

p. Once the panel has been properly leveled and checked for proper clearance around sterilizer, remove the panel assembly and complete the anchoring of the panel mounting bracket to the wall. Use appropriate (#10-32) anchors (not by AMSCO) for the nine (9) holes (7/32) in the mounting bracket.

This completes the trim panel installation. Unit is now ready for utility connections (see page 3-30).

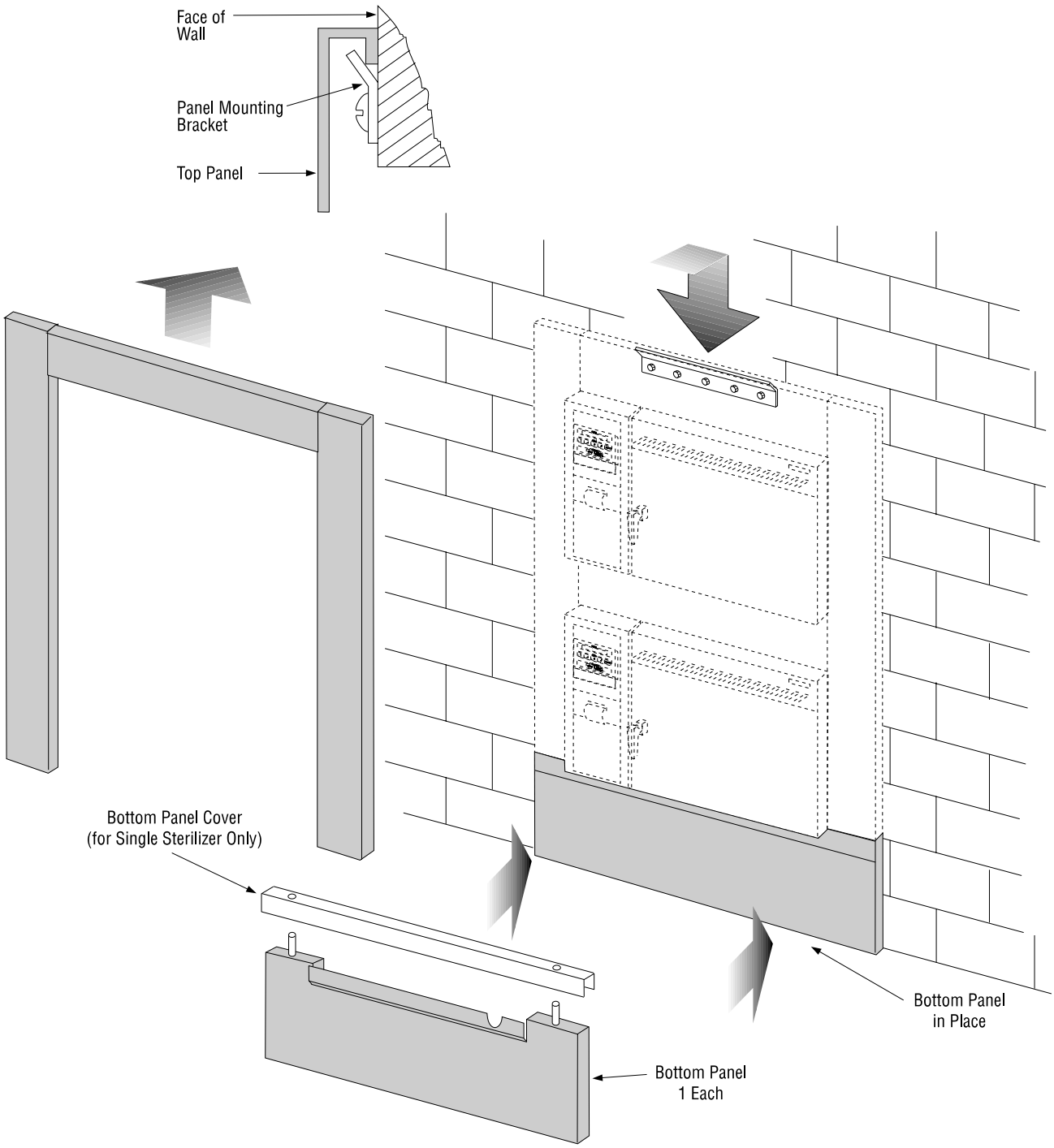


Figure 3-13. Mounting Trim Panel Assembly

3.4 Install Single Rack Mounted Sterilizer/Aerator

1. Rack Mount Components - Check that all major rack mount components shown in Fig. 3-14 are with the unit. If any of the components are damaged (no matter how slight), report it to your supervisor.

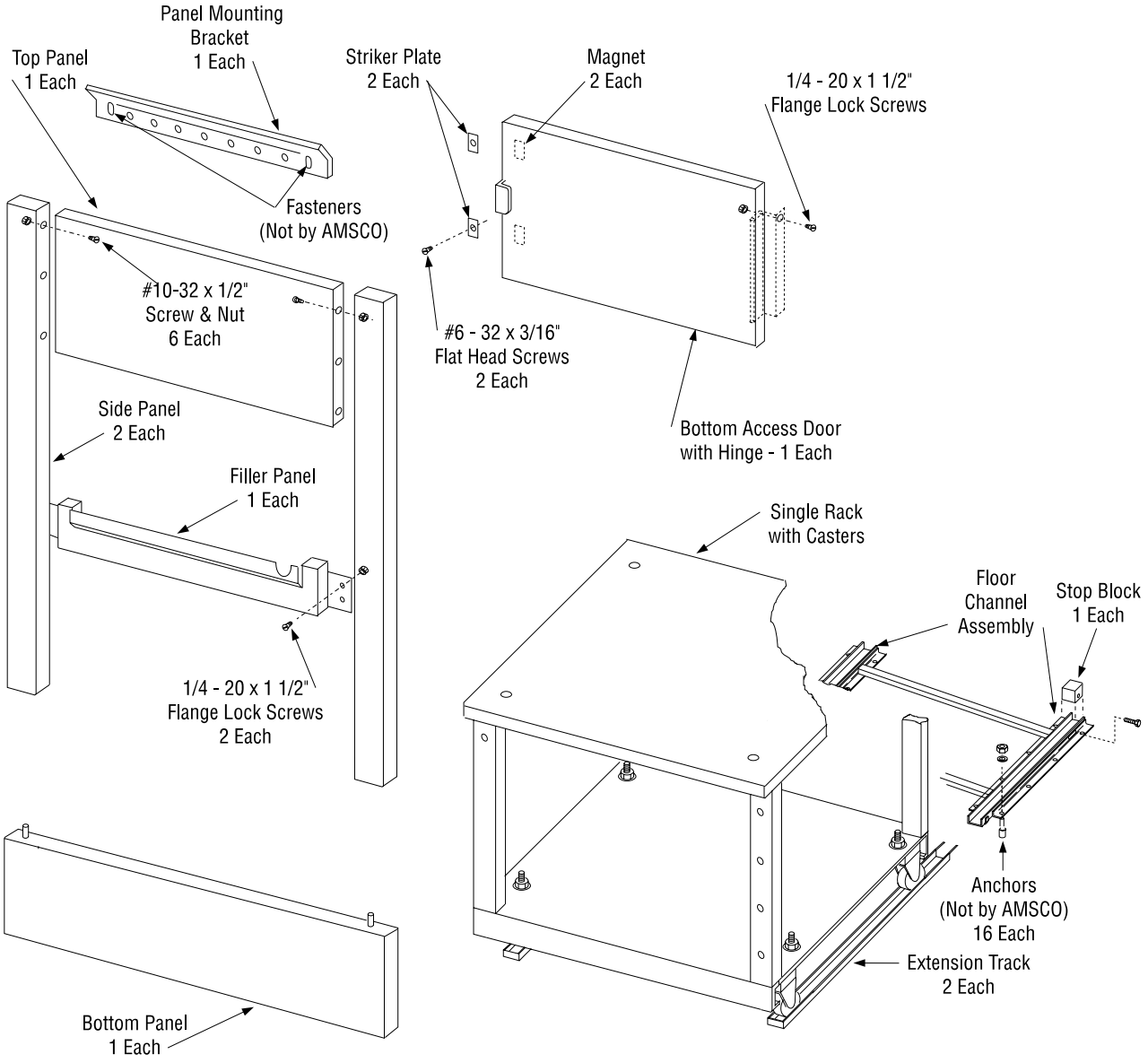

Panel Mounting Bracket 1 Each
Top Panel 1 Each
Striker Plate 2 Each
Magnet 2 Each
1/4 - 20 x 1 1/2" Flange Lock Screws
Fasteners (Not by AMSCO)
#10-32 x 1/2" Screw & Nut 6 Each
#6 - 32 x 3/16" Flat Head Screws 2 Each
Side Panel 2 Each
Bottom Access Door with Hinge - 1 Each
Filler Panel 1 Each
Single Rack with Casters
Floor Channel Assembly
Stop Block 1 Each
1/4 - 20 x 1 1/2" Flange Lock Screws 2 Each
Anchors (Not by AMSCO) 16 Each
Extension Track 2 Each
Bottom Panel 1 Each

Figure 3-14. Single Rack Mount Components

2. Floor Channel Installation - See Fig. 3-15.

   a. Set the floor channel assembly in place in the recess area with the holding tabs (see Fig. 3-15) of the floor channels at the front of the wall opening. Align the floor channel assembly so that the front edge of the track is 1/2" (12.7 mm) back from the front edge of finished wall and centered within the wall opening.

   b. Tape the floor channel assembly in place.

   c. Mark and drill two (2) holes front and rear for both floor channels.

   d. Use appropriate (1/4") anchors (not by AMSCO) for the four 3/8" dia. holes and bolt floor channel assembly in place. Drill balance of holes in channels and anchor all channel holes in place.

   e. Attach the stop block, as shown in Fig. 3-15, to the back end of the right hand channel. Temporarily adjust the stop block to the rear of the channel. Final adjustment will be done later during installation.

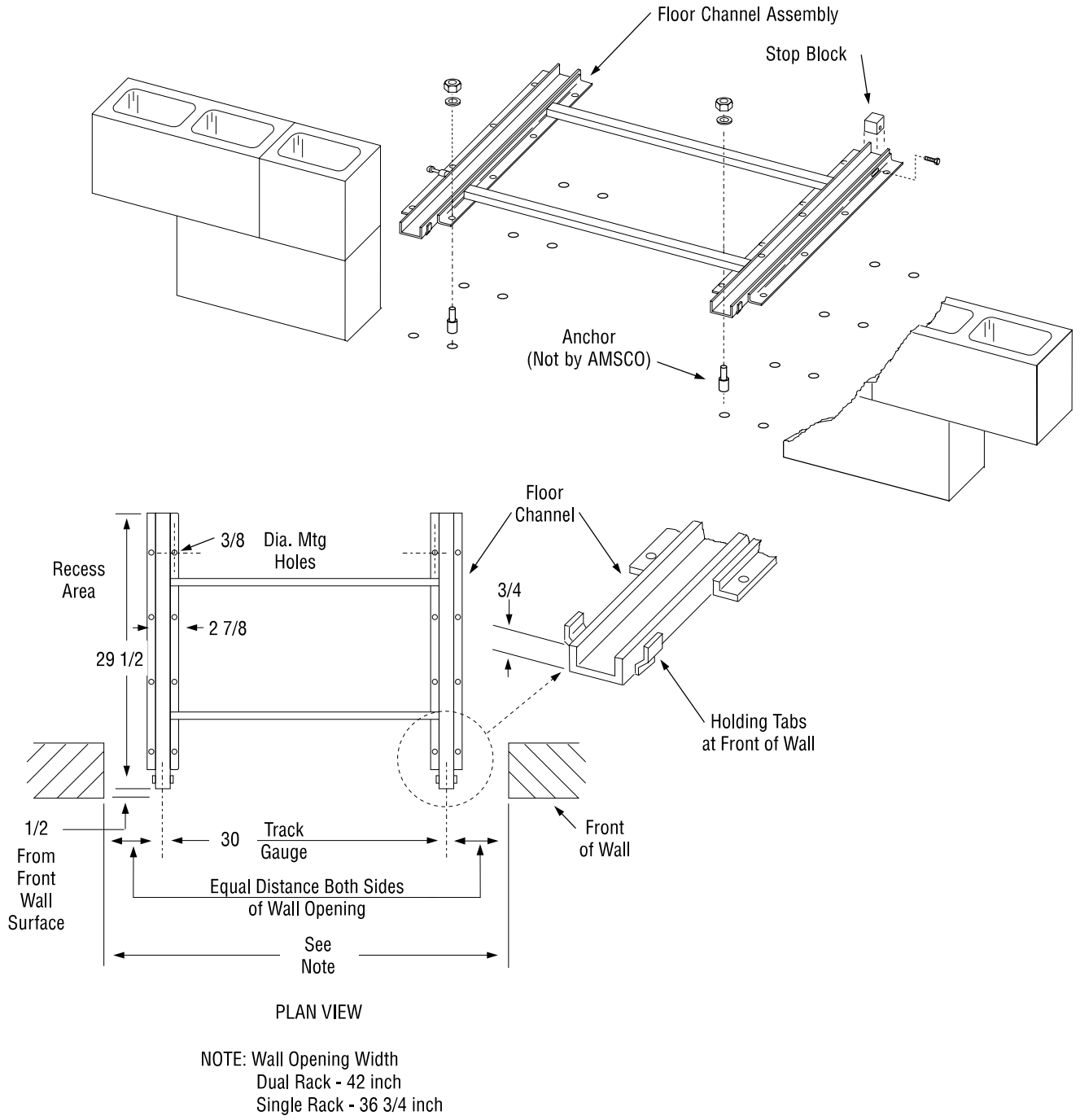


Figure 3-15. Floor Channel Installation

3. Rack and Extension Track Installation - See Fig. 3-16.

   NOTE: The rack top surface has a 1-1/8 " (2.86 cm) overhang (see Fig. 3-16, section A-A). This overhang will be the front of the rack.

   a. Roll the rack onto the floor channels in the recess area with the overhang towards the front of the wall opening.

   b. Adjust caster adjustment bolts (four) so that the top surface of the rack is 28-3/4" (73 cm.) above the floor surface in the recess area (See Fig. 3-15). Check that the rack is level (with a spirit level) side to side and front to back.

   c. Attach the two extension tracks to the floor channel holding tabs.

   d. Roll the rack back out of the recessed area onto the extension tracks.

   e. The rack is now in position for sterilizer installation onto the rack.

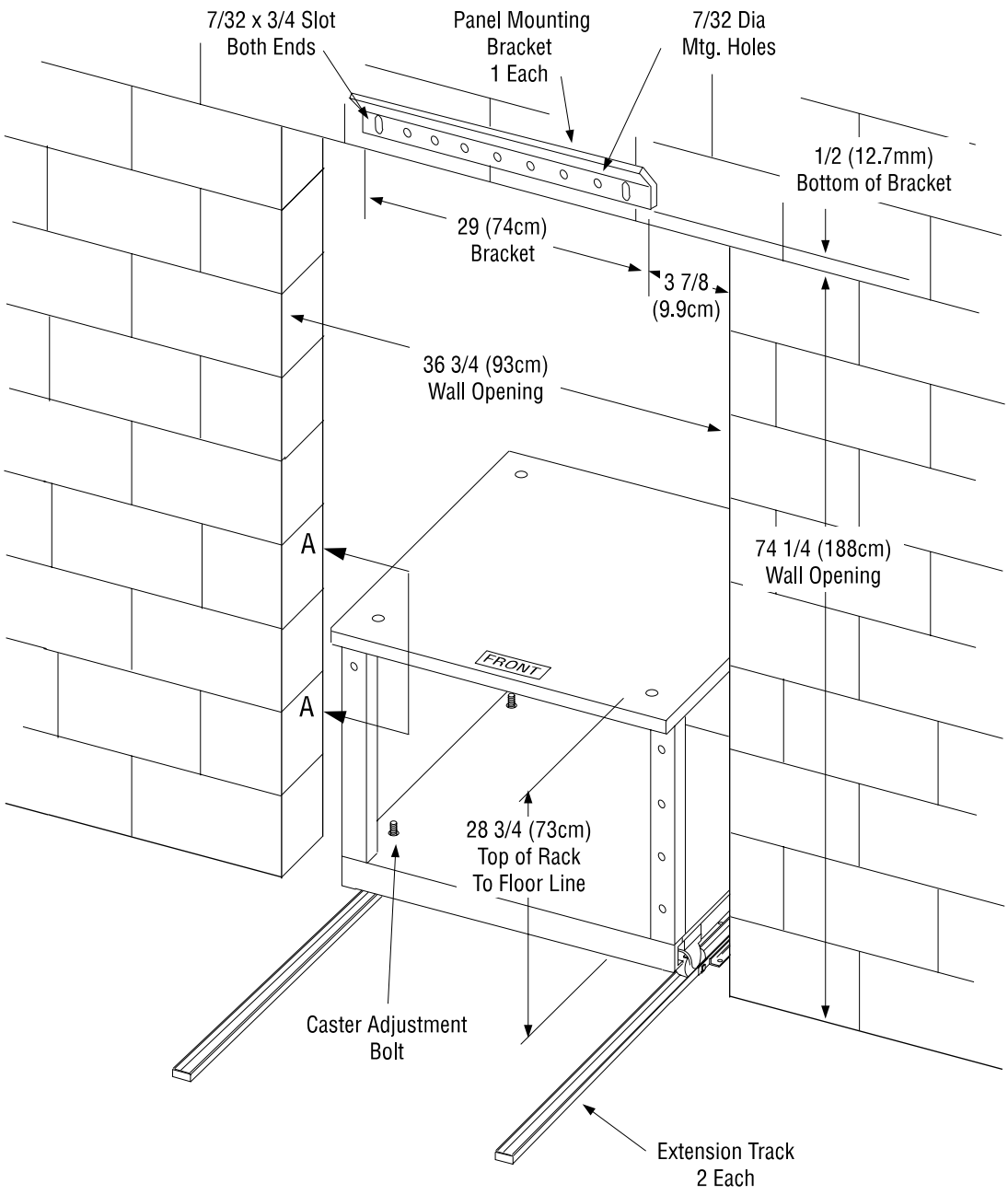


Figure 3-16. Panel Mounting Bracket, Rack and Extension Track Installation

4. Install Sterilizer onto Rack

   a. Remove the four (4) 3/8" hold down bolts, one each corner, from underside of top of pallet. Bolts are approximately 8" back from the front and the rear of the pallet.

      IMPORTANT: Keep the four 3/8" bolts as they will be used later to attach sterilizer to rack mount shelf.

   b. Use a transfer device with forks (1" maximum thickness) spread apart to a maximum of 26" (660mm spread). Remove sterilizer (300 lbs. [136 Kg] for 100/120V units and 340 lbs. [154 Kg] for 240V units.) from shipping pallet. (See Fig. 3-16.)

NOTE: The foam pads that the sterilizer sits on are 26¼" (668mm) apart.

5. Install Sterilizer/Aerator (See Fig. 3-17).

   a. Temporarily adjust the four (4) sterilizer leveling pads to 1-3/8" (35mm), to permit removal of transfer device after sterilizer is set on rack, from bottom of sterilizer base to bottom of level pad. Set sterilizer on top of rack.

   b. Remove transfer device from under sterilizer.

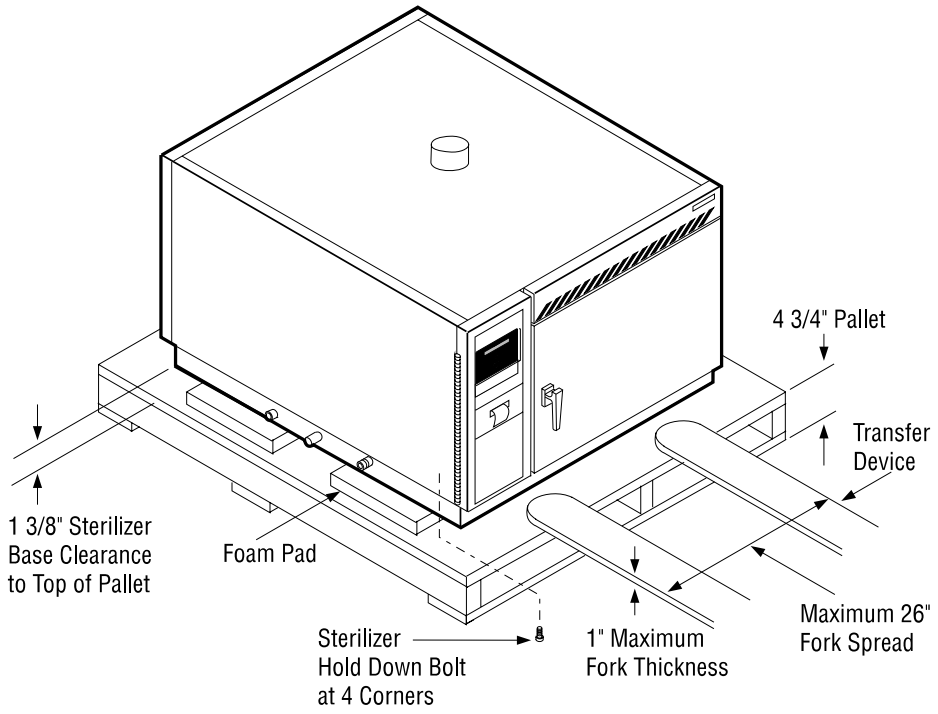

4 3/4" Pallet
Transfer Device
1 3/8" Sterilizer Base Clearance to Top of Pallet
Foam Pad
Sterilizer Hold Down Bolt at 4 Corners
1" Maximum Fork Thickness
Maximum 26" Fork Spread

Figure 3-17. Sterilizer on Shipping Pallet

c. Position the sterilizer so that the front of the sterilizer base (see Fig. 3-18, section A-A) is flush with the front of the rack. Center the sterilizer base side to side.

d. Loosely bolt sterilizer to rack using the four (4) 3/8" bolts that were used to attach the sterilizer to the shipping base. Do not tighten bolts at this time.

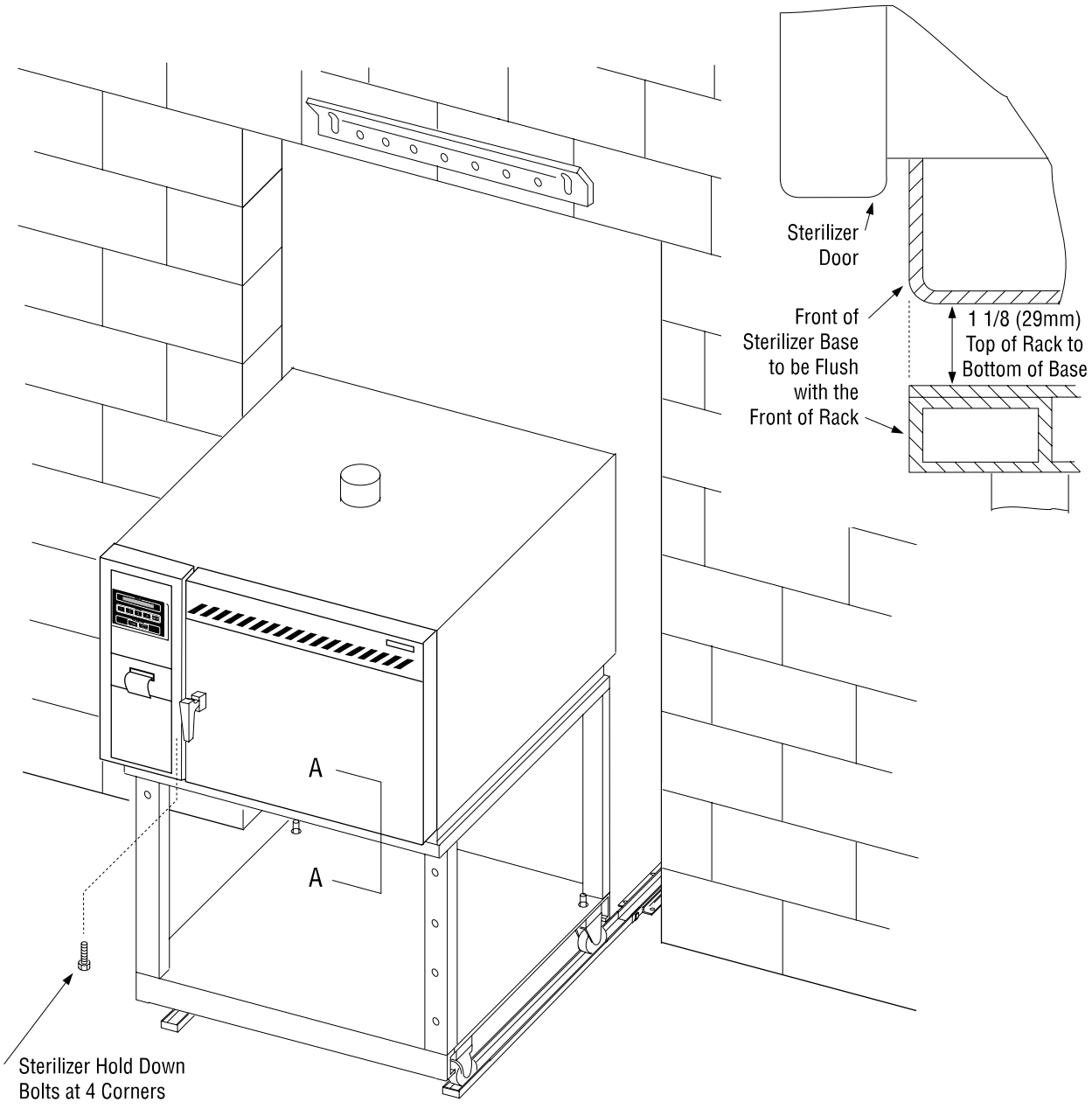


Figure 3-18. Sterilizer on Rack

6. Level sterilizer.

   a. Roll the sterilizer and rack back into the recess area.

   b. Adjust the four (4) sterilizer leveling pads (one at each corner of sterilizer) to a height of 1-1/8" (29 mm) from bottom of sterilizer base to top of shelf. (See Fig. 3-18, section A-A).

   c. Place a spirit level against vertical front surface of sterilizer operating end door for checking level of sterilizer front to back.

   d. Place a spirit level across the front top edge of the sterilizer cabinet for checking level of sterilizer side to side. Final mounting of the sterilizer will be made after the center trim panel has been installed.

7. Install trim panels - See Fig. 3-19.

   The mounting trim panel sequence is to be as follows:

   - Attach center panel to rack
   - Correctly position the sterilizer(s) and tighten
   - Mount lower access door and bolt hinge to frame
   - Mount striker plates and magnets
   - Rack stop and hook adjustments
   - Bolt side and top panels together
   - Install panel mounting bracket to wall
   - Mount top/side panel assembly and bottom panel

⚠ CAUTION: Remove protective coverings slowly to reduce the level of static discharge.

The extension tracks are to be in place (in front of the wall) and the rack is to be positioned outside of the recess area. See Fig. 3-16.

Remove the protective coverings from all panels.

   a. Attach center panel to the rack using four 1/4-20 x 2-3/4" screws and flange lock nuts.

   b. Adjust the sterilizer to center it with respect to the middle panel. The sterilizer should be pulled forward until the base is flush with the center panel. Tighten the four (4) bolts to secure the sterilizer to the rack shelf.

   c. Mount the door hinge to the rack using 1/4-20 x 1-1/2" flange lock screws and nuts. Check positioning of door, attach the remaining screws and nuts and tighten.

   d. Mount striker plates on rack and insert magnets into the door. Check the door closing to ensure that the door is flush when closed. Adjust the striker plates if necessary.

   e. Roll the rack and sterilizers into the wall opening, leaving approximately 1 to 2 inches sticking out into the room.

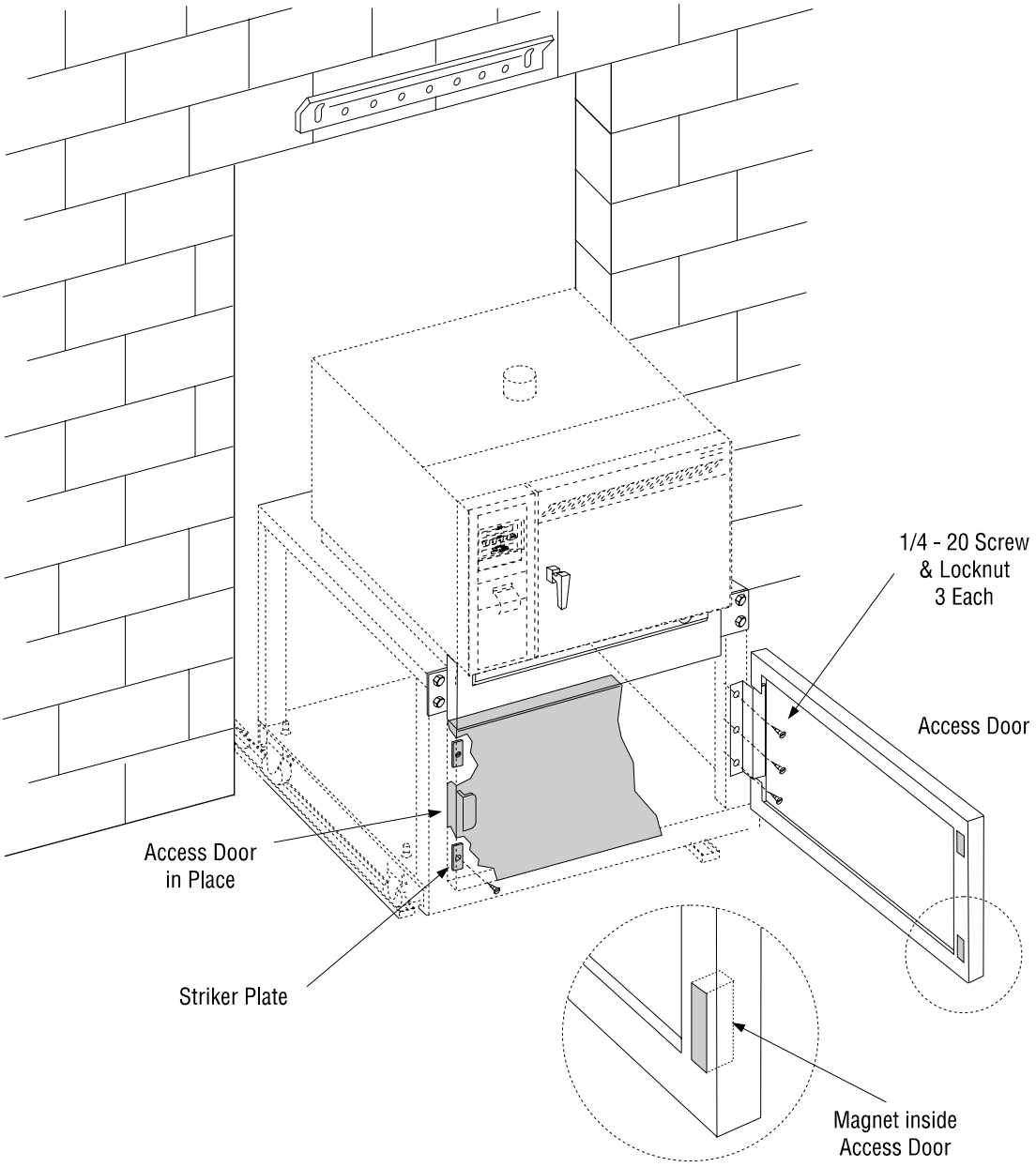


Figure 3-19. Door Installation

f. Rack Stop and Hook Adjustment - see Fig. 3-20.

The extension tracks are to be in place (see Fig. 3-16) and the rack should be positioned slightly outside of the recess area. The rack mount has a stop block, when installed properly, will insure proper positioning of the rack into the recess area. The rack mount hook keeps the rack from moving forward (out of the recess area) when sterilizer door is opened or closed.

Stop Block Adjustment - see Fig. 3-20.

1. Remove the stop block from the rear of the right floor channel. Apply pertroleum jelly (or equivalent) to the bottom of the stop block and channel portion beneath the block.
2. Reassemble the stop block (loosely) back onto the right floor channel in its forward-most position.
3. Slowly move the sterilizer and rack back into the recess area.
4. Position the sterilizer such that the front surface of the access door (see Fig. 3-21, section A-A) is 1 inch (25.4 mm) in front of the wall opening.
5. Tighten the stop block taking care not to move the block position while tightening the block in place. See Fig. 3-20.

g. Hook Adjustment - See Fig. 3-20.

1. Attach the hook assembly to the holding bracket located at the lower left (front) corner to the rack mount.
2. The rack mount must be in place within the recess area and the right rear caster must be in contact with the stop block.
3. Place the hook over the shoulder bolt and tighten the nut on the shaft of the hook to keep the hook in the locked position.
4. Remove the two (2) extension tracks from the floor channels and store them either on or under the bottom rack shelf within the recess area.

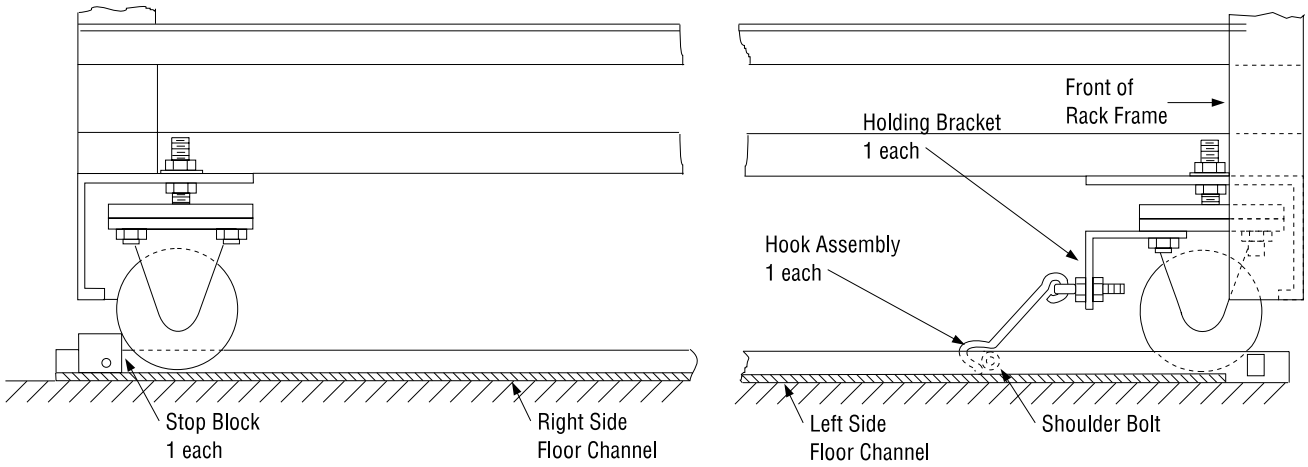


Figure 3-20. Rack Stop and Hook Adjustment

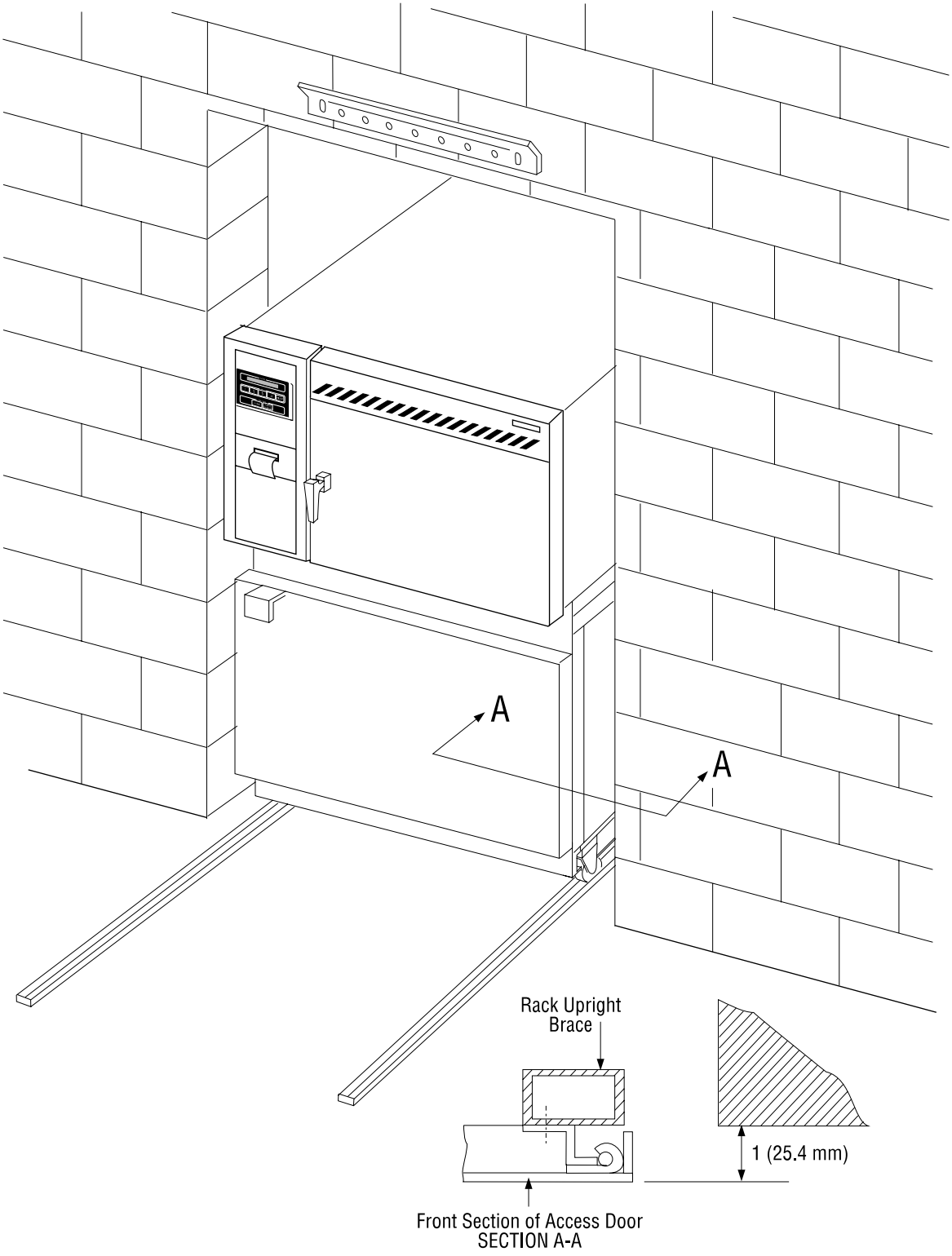


Figure 3-21. Move Sterilizer and Rack Into Recess Area

h. Assemble side trim panels to the top trim panel using (6) 10-32 x 1/2" screws and 10-32 nuts.

i. Mount the panel mounting bracket above the wall opening 74-3/4" from the floor to the bottom of the bracket using **only** the two (2) slotted holes at ends of the bracket. Do not tighten at this time

j. See Fig. 3-22. Place the assembled trim panels (top and side panels) around the sterilizer by placing the right hand upright behind the large sterilizer door hinges and then the left side upright behind the control door hinges. Push the sterilizer and trim panel assembly back until the side panels are flush to the wall.

k. Lift the trim panel assembly up approximately 1" and place the kick panel on the floor under side trim panels.

l. Slowly slide the trim panel assembly downward until top panel engages the panel mounting bracket and the holding pins in the bottom panel insert into the holes on the side trim panels. Check the panel assembly with a spirit level.

m. Once the panel has been properly leveled and checked for proper clearance around sterilizer, remove the panel assembly and complete the anchoring of the panel mounting bracket to the wall. Use appropriate (#10-32) anchors (not by AMSCO) for the nine (9) holes (7/32) in the mounting bracket.

This completes the trim panel installation. Unit is now ready for utility connections (see page 3-30).

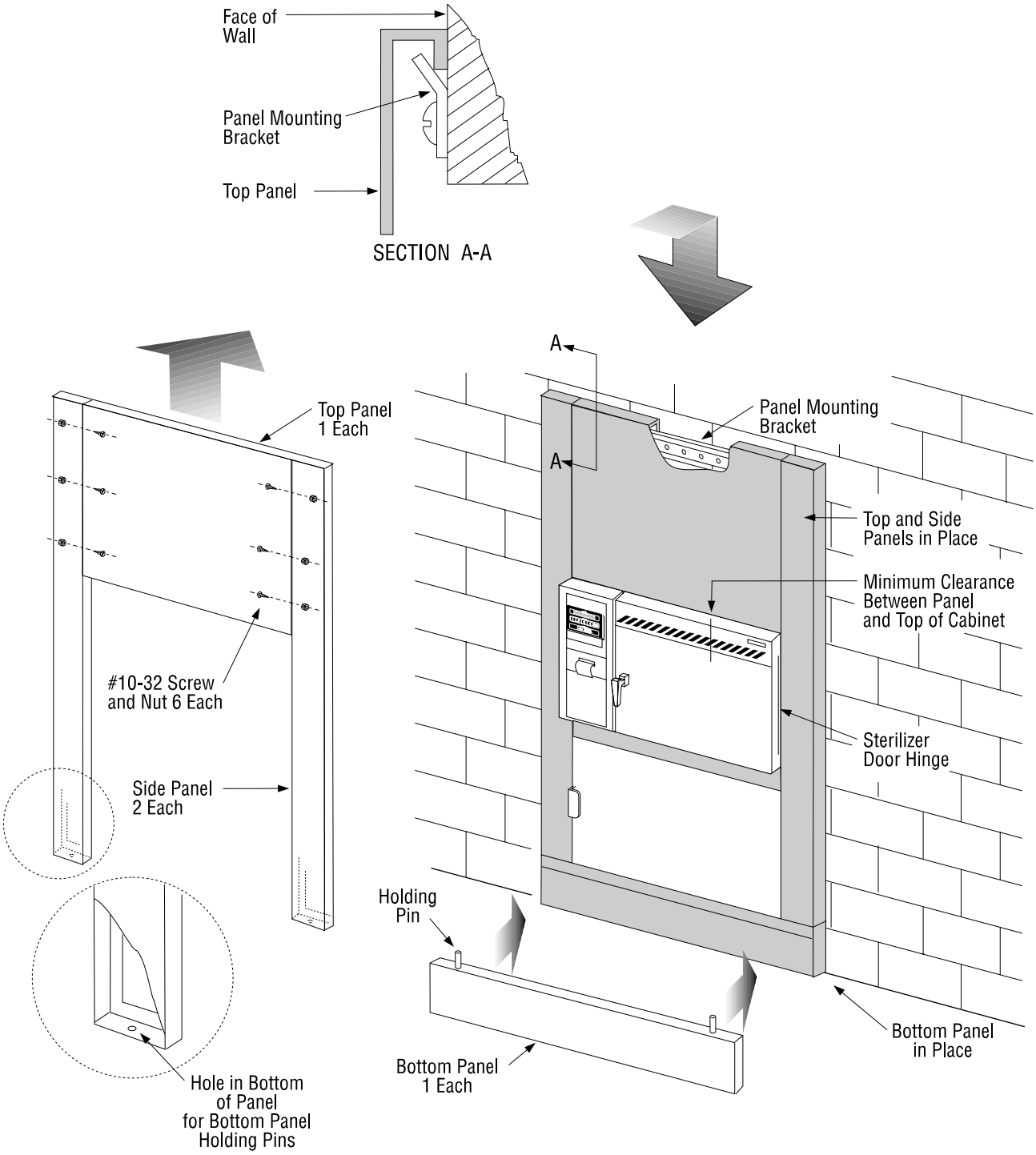


Figure 3-22. Mounting the Trim Panel Assembly

8. Connecting Utilities to Double Rack or Single Rack Sterilizer/Aerator. See Fig. 3-23.

   a. Flexible Connections - See Fig. 3-24.

      Flexible Connections are required for the Model 3017 Rack Mounted EO Sterilizer/Aerator to connect to building utilities for compressed air, EO gas exhaust, EO ventilation duct and electrical power supply. This is required to permit rolling the sterilizer and rack mount out of the recessed area for servicing.

      IMPORTANT: Flexible connections are to be of sufficient length to permit complete removal of the rack from the recess area for servicing.

      NOTE: Installation kit for the air supply and EO gas exhaust flexible connections is shipped with mounting rack. Electrical power supply lines are not included.

Refer to appropriate AMSCO Equipment Drawing for required pressures and quality of those services as well as proper connection locations and connection size recommendations.

NOTE: Sterilizer terminal line fittings are tagged. Refer to Equipment Drawing for pipe sizes and supply requirements. Building service lines to and from the equipment should be sized to allow specified pressure and flow rates. Failure to supply recommended pressures and flow rates may cause equipment to malfunction.

   b. Utility Flexible Connections - see Fig. 3-24.

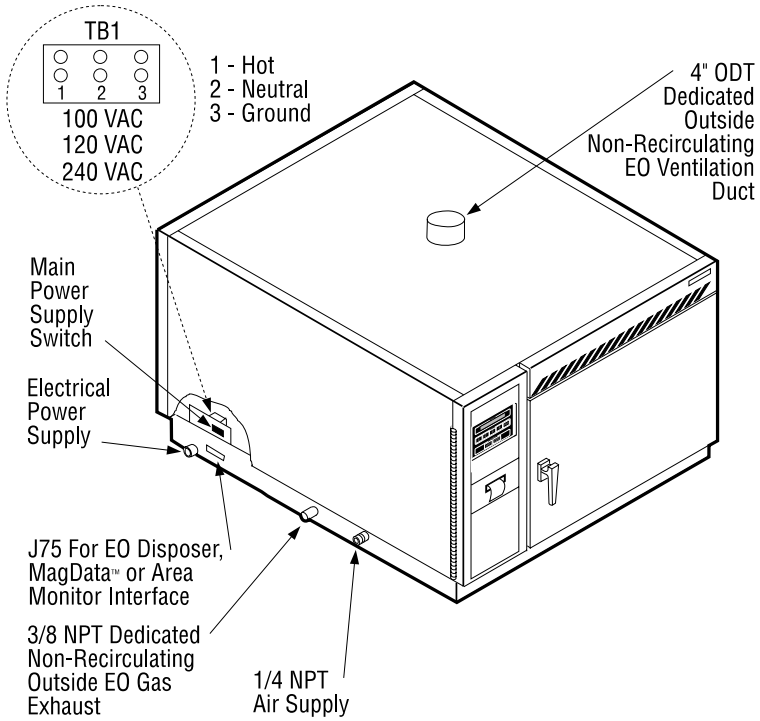
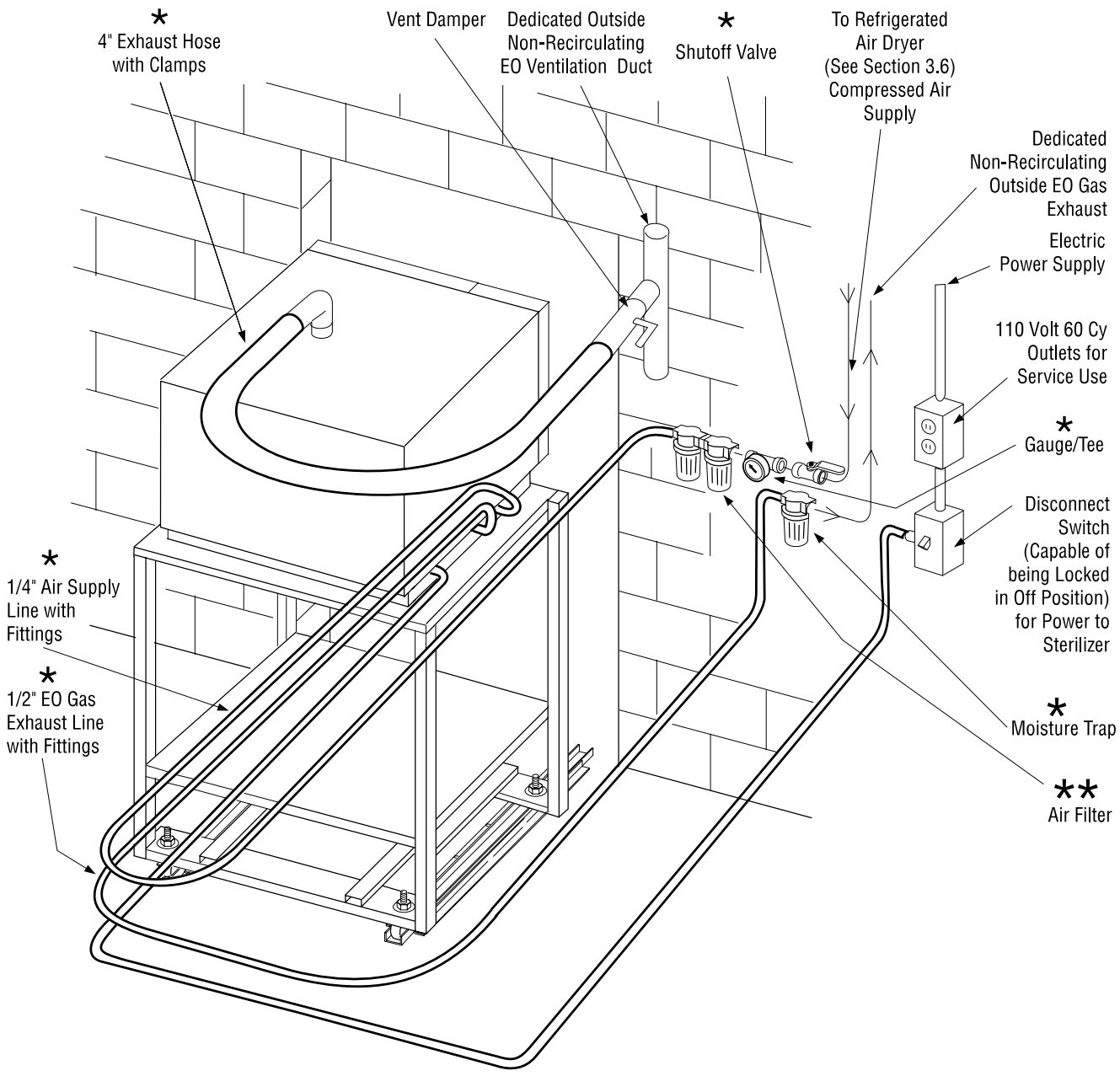


Fig. 3-23. Utility Connections


* 4" Exhaust Hose with Clamps
Vent Damper
Dedicated Outside Non-Recirculating EO Ventilation Duct
* Shutoff Valve
To Refrigerated Air Dryer (See Section 3.6) Compressed Air Supply
Dedicated Non-Recirculating Outside EO Gas Exhaust
Electric Power Supply
110 Volt 60 Cy Outlets for Service Use
* Gauge/Tee
Disconnect Switch (Capable of being Locked in Off Position) for Power to Sterilizer
* 1/4" Air Supply Line with Fittings
* 1/2" EO Gas Exhaust Line with Fittings
* Moisture Trap
** Air Filter

* - Supplied In AMSCO Installation Kit

** - Supplied With Eagle Model 3017 Sterilizer Aerator

Notes:

1 - All other Items NOT Supplied by AMSCO

2 - Electrical Utility Connections are NOT Supplied Due to Variation in Local Codes

Figure 3-24. Flexible Utility Connections

⚠ WARNING: EO is toxic. Do not attempt to operate this equipment until all utility connections have been made and are operating correctly. Users must be trained and must carefully review the equipment manuals and EO Safety Guidelines prior to operating this equipment.

1. Compressed Air Supply - blow out building air supply line to remove debris. Mount air filter/dryer (supplied with sterilizer) near sterilizer and connect to building compressed air supply. Connect flexible line from air dryer to sterilizer. (See Section 3.6 for more information on refrigerated air dryer.

   NOTE: Quality of air supplied to the 3017 is very important. Air contaminated with oil or water will cause sterilize malfunction. Dry, oil free air must be supplied.

   Shut Off Valve (capable of being locked out) must be installed in the compressed air supply line near the sterilizer so that sterilizer can be serviced without shutting off the building supply.

2. EO Gas Exhaust (temperature range is 100°F [38°C] - 130°F [54°C]) from the EO gas sterilizer is to be connected to an EO gas disposer or direct piped to outside of building. Mount a moisture trap (supplied with AMSCO installation kit) near sterilizer if the vertical rise of the gas exhaust line exceeds 10 ft (3m). Connect moisture trap to gas exhaust line. Connect flexible line from moisture trap to sterilizer.

Do not connect EO gas exhaust to ventilation duct (item 4. below).

3. Electrical - Connect building electrical supply line to power input sterilizer terminal board (TB1) as shown in Fig. 3-23.

   Disconnect switch (capable of being locked in OFF position) must also be installed in the electrical supply line near the sterilizer.

NOTE: Electrical utility connections are not supplied with the AMSCO installation kit due to variation in local codes.

IMPORTANT - Check to be sure that the sterilizer power supply switch is in the OFF position prior to connecting electric power to the sterilizer.

NOTE: Voltage depends on model ordered.

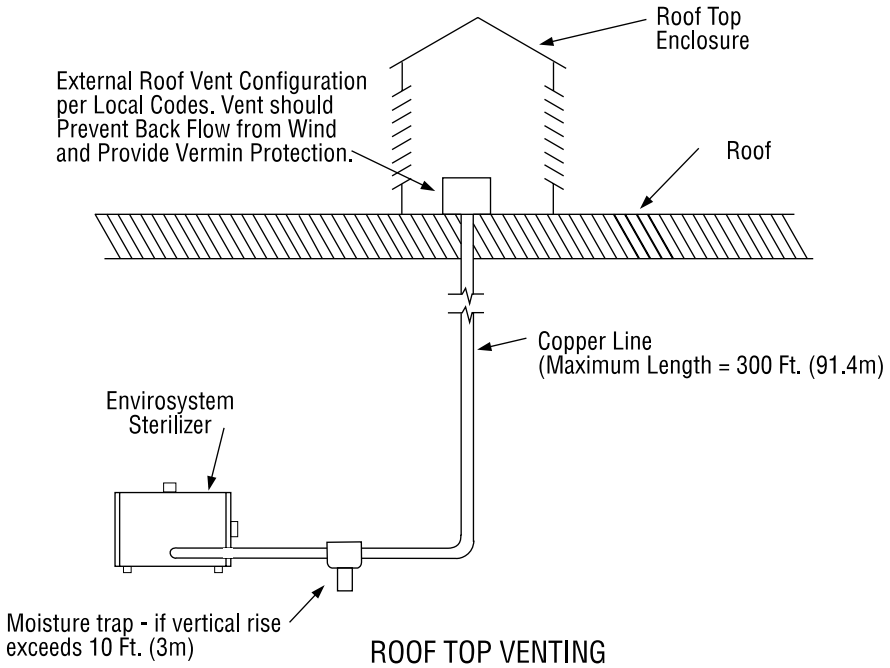
- 100/120/240 volt HOT (black wire) to terminal
- 100/120/240 volt NEUTRAL (white wire) to terminal
- GROUND (green wire) to terminal

Remove sterilizer left side panel by removing three screws located at bottom edge of side panel and lifting it up. Connect flexible electric power supply to terminal board TB1. Reinstall side panel onto sterilizer with screws.

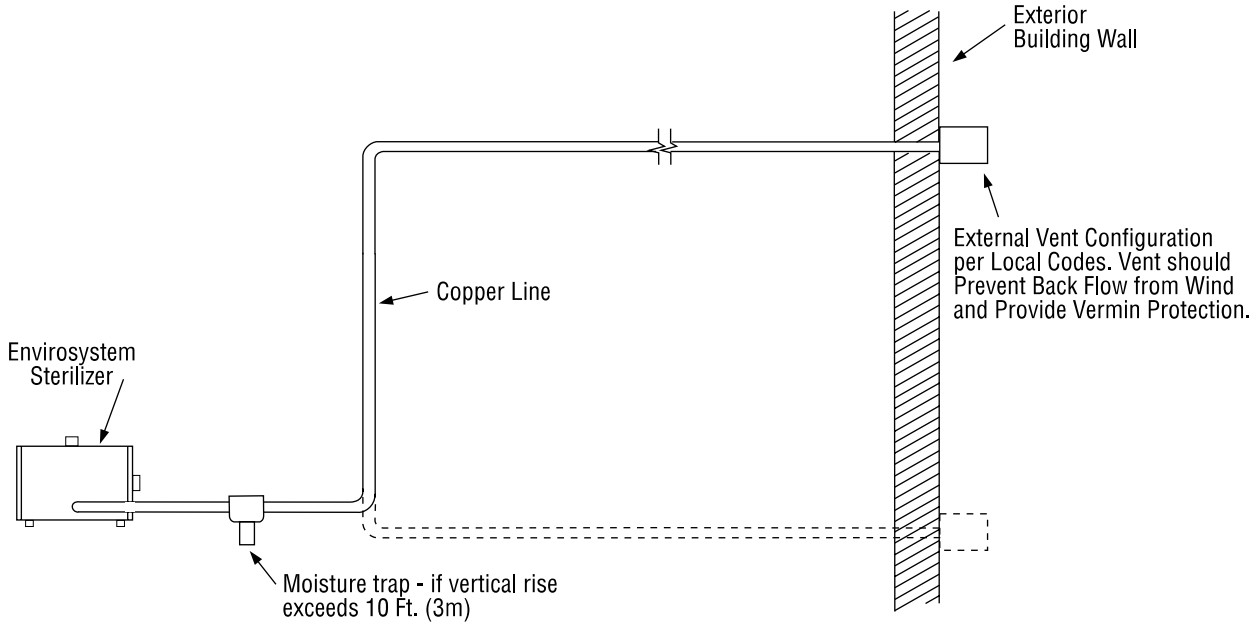
4. Ventilation Duct - Connect the flexible 4" (102mm) O.D. tube to building dedicated outside EO gas exhaust system. Ventilation duct to include a damper (not by AMSCO) for sterilizer test purpose.

NOTE: The outside dedicated EO exhaust terminal must be located at a minimum of 25 feet from any builidng air intake, window or door. AMSCO recommends you consult your HVAC professional.

This completes the installation of the rack mounted sterilizer/aerator. The unit is now ready for sterilizer basket removal from sterilizer chamber prior to placing the sterilizer into operation.



ROOF TOP VENTING



HORIZONTAL VENT LINE
AND VERTICAL RISE

TYPICAL EO GAS EXHAUST VENTING SYSTEMS

WARNING: EO is toxic. Do not attempt to operate this equipment until all utility connections have been made and are operating correctly. Users must be trained and must carefully review the equipment manuals and EO Safety Guidelines prior to operating this equipment.

3.5 Sterilizer Basket Removal

The Eagle 3017 EO Gas Sterilizer/Aerator is shipped with two (2) baskets secured inside sterilizer chamber.

NOTE: The sterilizer is shipped with the sterilizer door(s) in a locked position. The door(s) cannot be opened until all utility lines are connected (and functional) to the sterilizer.

The sterilizer baskets (two) are secured (during shipment) within the sterilizer chamber by a piece of cardboard. The cardboard should be removed prior to placing sterilizer into operation.

1. Turn ON all utility services to sterilizer.
2. Turn ON sterilizer Main Power Supply Switch (see Fig. 3-25). The main power supply switch is located behind the left side cabinet panel. To turn switch on, remove three (3) screws located at bottom edge of side panel and lift it up. Turn main power supply switch ON. Reinstall side panel onto sterilizer with mounting screws.
3. Open sterilizer operating end hinged printer cover (see fig. 3-26).
4. Turn ON sterilizer control power supply switch.

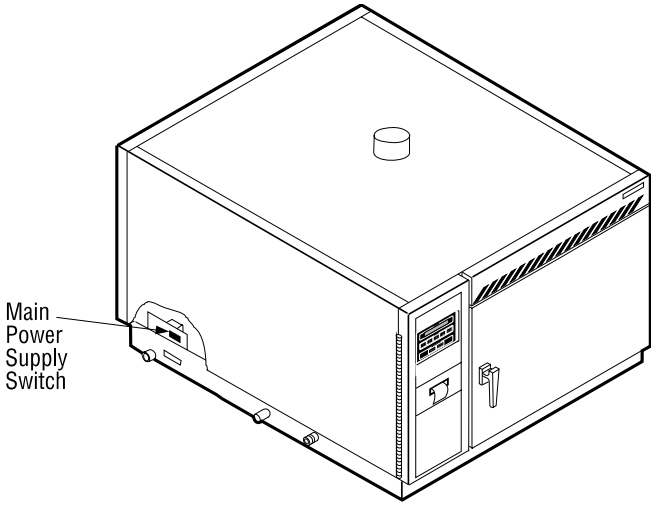


Figure 3-25. Main Power Supply Switch

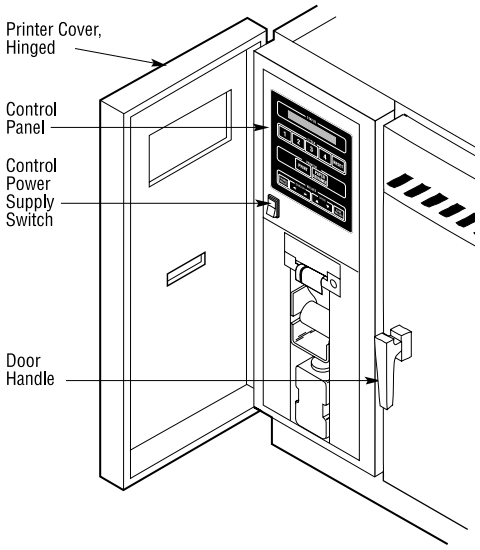


Figure 3-26. Control Component Location (Operating End)

5. Rotate door handle (see Fig. 3-27) counterclockwise as far as it will go and swing door open.
6. Remove baskets from sterilizer chamber (see Fig. 3-28) and discard cardboard and foam packing material.
7. Place baskets back into chamber.
8. Close sterilizer door and rotate door handle (see Fig. 3-27) clockwise to lock sterilizer door.
9. Turn OFF sterilizer control power supply switch (see Fig. 3-26).

Figure 3-27. Door Handle

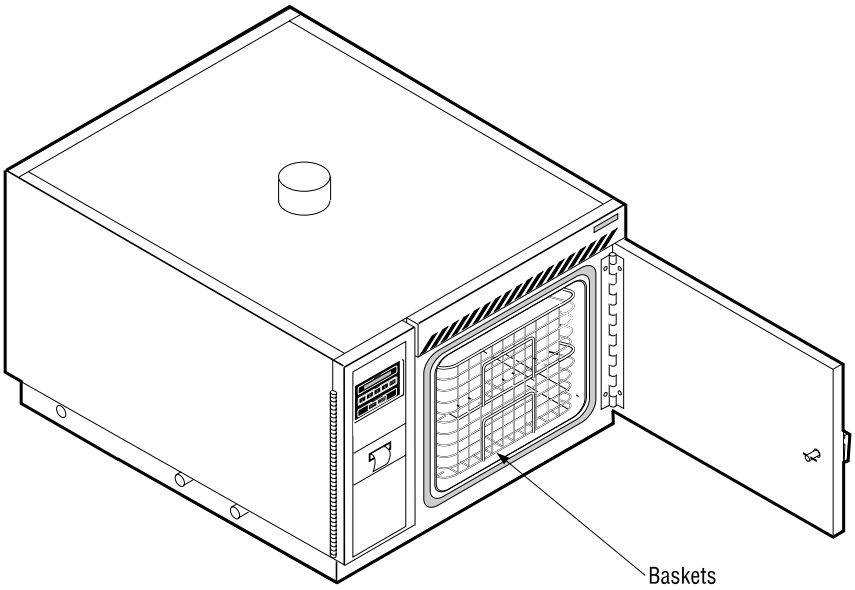


Figure 3-28. Baskets Inside Sterilizer Chamber

3.6 Refrigerated Air Dryer

Instructions for installation are supplied with each refrigerated air dryer. Failure to install the unit properly will result in poor equipment operation or damage.

The air dryer will require a separate 120 VAC supply. The air dryer is designed to run continuously and should not be wired in to cycle on/off with the compressor.

Note that air dryers are sourced from different vendors and are considered functional equivalents, however replacement parts will depend on the vendor. The Illustrated Parts Breakdown manual lists the different models used, prior to ordering replacement parts, verify the correct model number.

3.7 Area Monitor Interface

If the sterilizer is to be interfaced with an area monitor, the following will be necessary:

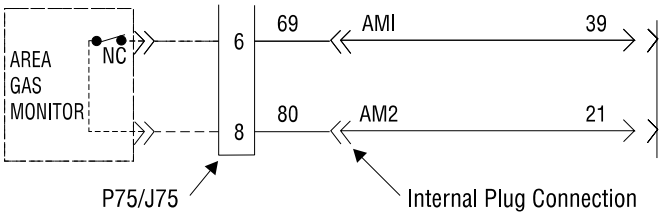
1. Area monitor must provide dry, normally closed (NC) contacts that open during alarm condition.
2. The relay contacts must be designed for low voltage operation (i.e., gold contacts). Relay contacts designed for high-voltage operation may cause false alarms due to contact resistance.

The sterilizer interface will be done in one of two ways:

1. Units with EO Disposer or MagData options. Obtain a suitable 25 pin D connector from a computer supply store and install pin in position 6 and 8. Wires from area monitor relay are to connect to pin 6 and 8. Connect D connector to side of sterilizer at J75.

   Then remove side cover and locate harness labeled AM. There will be two in the sterilizer, one side connected to the sterilizer J75, and the other in the sterilizer harness. Locate the plug installed from the factory. Remove the jumper plug and connect to monitor plug to complete the connection.

2. Unit with EO Disposer or MagData. Included with these options is a cable harness that plugs to J75 on the side of the sterilizer. The harness includes wires 69 and 80 which are to be connected to the area monitor relay. It is also necessary to locate the internal plug connection. This is inside the control and is labeled “AM”. Remove the factory installed jumper and connect the mating plug together.



CLEAN THE STERILIZER

4

CAUTION: Never use a wire brush, or steel wool on door and chamber assembly.

WARNING: EO is toxic - Do not attempt to operate this equipment until all utility connections have been made, and are operating correctly. Users must be trained and must carefully review the equipment manual and EO Safety Guidelines prior to operating this equipment.

1. Clean panels with suitable non-flammable cleaning agent to remove any adhesive.
2. Place plastic shipping shroud (or similar material) over the sterilizer until it is placed in operation. This will protect valves, switches and other components from construction dust.

THIS COMPLETES THE INSTALLATION. Before operating the equipment, initial checkout and test should be conducted by an AMSCO service technician or equivalent person familiar with operational test procedures, including leak testing. Contact your local AMSCO representative ... he will gladly schedule a checkout and test your installation and show the persons designated how to operate the equipment.